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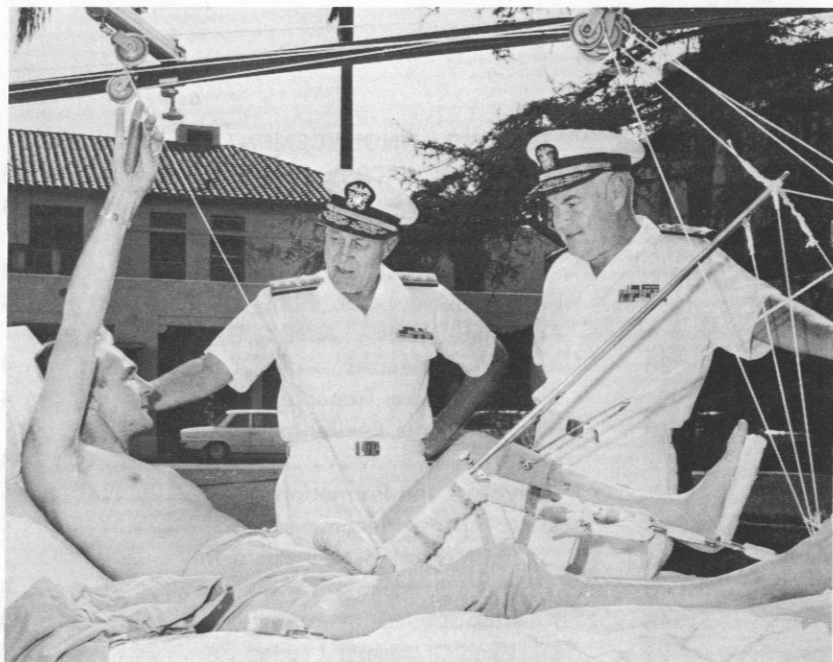
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Our front cover bears an exceptionally fine view of the Chapel at the U.S. Naval Academy, Annapolis, Md., on a fall morning. In the lower right insert are Midshipman Second Class Michael J. Bosse (left) and Midshipman Second Class Rodney W. Savage (right), members of the first group of midshipmen to take the Premedical course offered at the Naval Academy since the beginning of the 1970 academic year.

We are indebted to PHCM Ken Bumpus, USN, Staff Photojournalist, PAO, U.S. Naval Academy, Annapolis, Md., for this splendid cover.

The photo on page 2 was taken during a past trip of the Surgeon General to Naval Hospital San Diego, Calif. RADM Horace D. Warden, MC, USN (now retired) (left), former Commanding Officer of the naval hospital, and VADM George M. Davis, MC, USN, Surgeon General (right) visit with a patient under treatment by the Orthopedic Service.

The continued support of Ms. S.B. Hannan, BUMED Code 2133, and the Illustration and Exhibits and Photography Divisions of the Medical Graphic Arts Dept., Naval Medical Training Institute, NNMC, Bethesda, Md., is gratefully acknowledged.



from the Chief

Throughout all the ages of Judeo-Christian tradition, from the celebrated infant at Bethlehem to the average child of today who "believes," Christmas has evoked a solemn exultation of complete trust and love. Beneath the outer show of merriment there lies an ardent spiritual joy, the extent of which is directly proportional to the measure of a man or woman.

It is often said that "Christmas is not the same without the children." And who are the children, if not the pure of heart? Such hearts are truly open, giving and receiving guileless love; They are without the pain of fury or the curse of hatred; They are not crippled by prejudice.

For you and your families, I would wish a Merry and Beautiful Christmas. May each of you find and reflect the true spirit of it.

In the heart where prejudice lies, there can be no joy. Where there is no joy, there can be no Christmas.





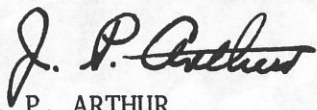
DEPARTMENT OF THE NAVY
ASSISTANT CHIEF OF THE BUREAU OF MEDICINE AND SURGERY FOR DENTISTRY
AND
CHIEF OF THE DENTAL DIVISION
WASHINGTON, D. C. 20390

CHRISTMAS GREETINGS

At this most Holy Season, one's relationships with his fellow men assumes special significance. Family, friends, associates, even strangers draw closer to one another in a renewed brotherhood of man.

In the coming year, let each of us strive to retain this divine inspiration so that we may truly attain PEACE ON EARTH AND GOODWILL TOWARD MEN.

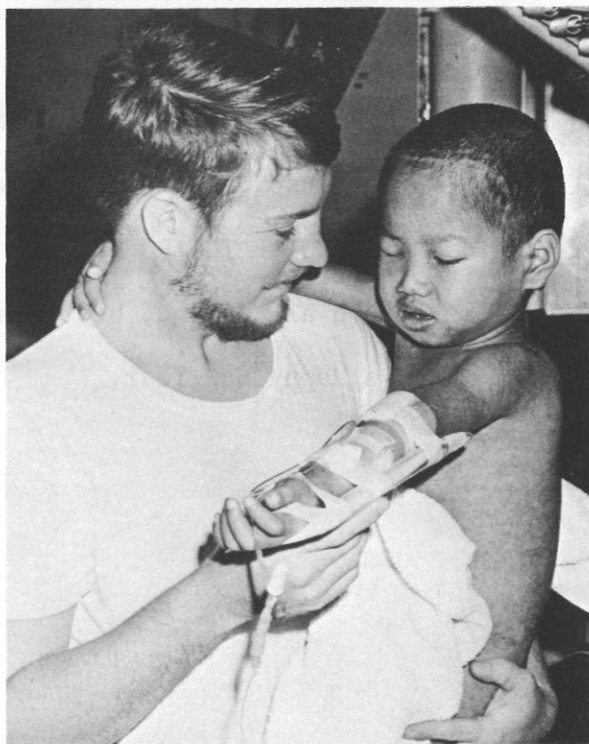
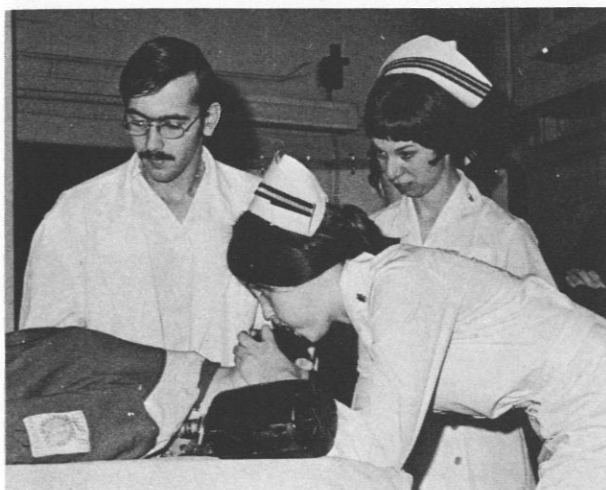
To all of you, best wishes for a Merry, Merry Christmas and a Happy New Year.


J. P. ARTHUR
Rear Admiral, DC, USN

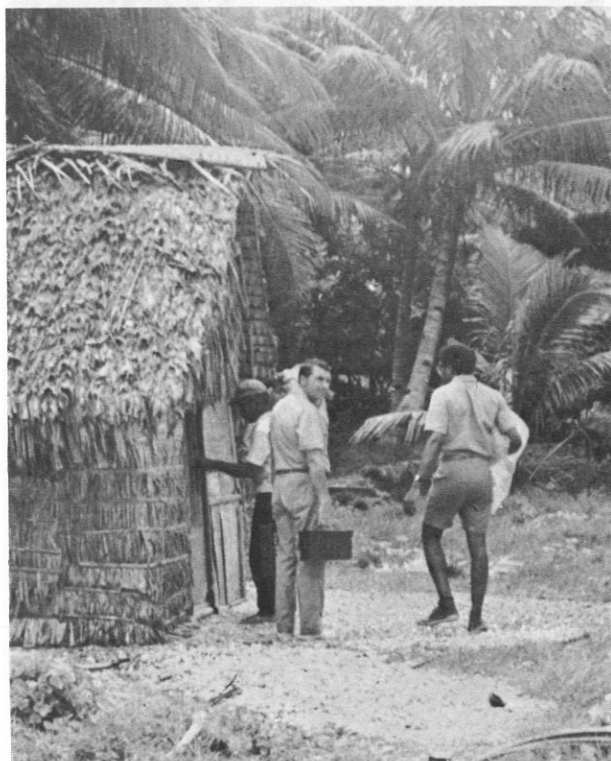
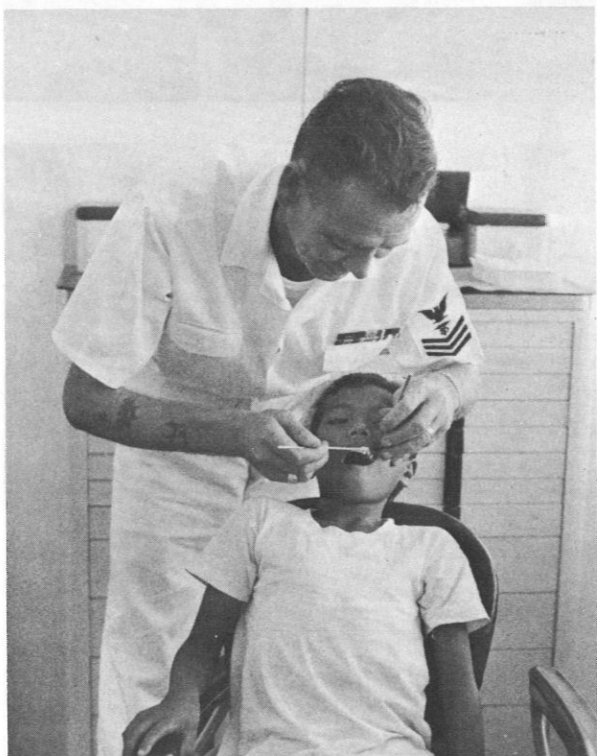


Don't Stop - We Like to Cheer

With a special hope and joy in Christmas 1972, U.S. NAVY MEDICINE extends greetings and warmest regards to each and every member of the Navy Medical Department. It is the time of year when one is forgiven for exchanging notes and pictures of family members, enumerating their virtues and extolling their achievements. And so we are wont to indulge in this seasonal pleasantry.



Everything considered, we think we know you all about as well as anybody can. Your concerns and decisions cannot be left at the office; they accompany you, not infrequently, on a 24-hour basis. If you are sometimes preoccupied, or even a bit cranky on rare occasions, it's understandable. You deal with intense human situations and make important decisions, accepting the reality that nothing is ever routine from the patient's point of view.

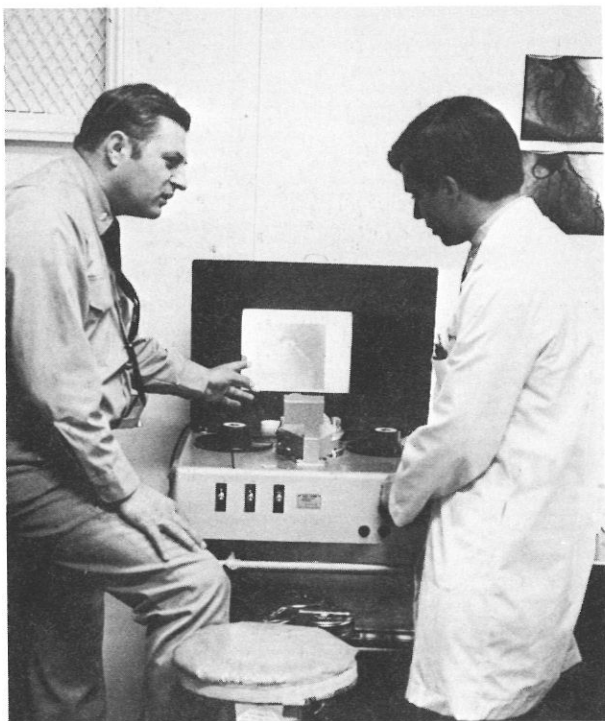


Great self-discipline is required of you; it always will be. No profession exceeds your own in provocation, and relentless demand for control of spontaneous feelings — despair, disgust, revulsion, horror, fear, pity, discouragement, and indecision. We have long suspected that those who speak of cold indifference have never had to master the delicate art of revealing just the right amount of compassion, without succumbing to overt grief and the functional paralysis which attends it.



Ironically you invite criticism from some observers by maintaining the very calm and objective professional demeanor that allows for a patient's reactions, needs and emotions to override your own.

To each man, his own calling is supreme. Yet few would deny the superlative importance of your work. That particular distinction is freely granted when you are taken to task, but so often discounted when you seek support. Lacking the comfortable insulation of referendums, committees, popular vote and legal debate, you accept sole responsibility for making important decisions and acting swiftly in the virtual struggle for life.



It is a grave burden which you respect and understand better than most; yet, you are invariably the last to speak openly of this solemn obligation. The emotion runs deep, beyond plain view and understanding. It is inextricably related to your choice of profession, your *raison d'être*.

In recent times you've entered into dialogue more freely with those not medically oriented. In a complex area which lacks pure art form or mathematical precision, you are compelled to speak and teach in the language of laymen, to be honest, accurate, quick, adroit, and tactful. If some regard you as patronizing, arrogant and evasive under these awkward circumstances,

you are required to operate with singular dignity and sensitivity. When you can swallow the hurt with grace, collect your wits and preserve the patency of communication, you deserve our highest respect.

You have worked hard to earn, and retain, the competence and confidence required in your profession. There is in you something unique: No monetary value or academic credit can be placed upon it; It cannot be computerized or mass produced. Whatever it may be that we perceive in you all year long, we are particularly inclined to dwell upon in December.

From the U.S. NAVY MEDICINE staff 🍀

Endocrine Function of the Kidney

By LCDR Richard F. Cioffi, MC, USNR,*
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Naval Hospital, National Naval Medical Center,
Bethesda, Maryland.

In recent years, attention has been focused on two aspects of renal physiology: factors governing handling of salt and water by the proximal tubule, and the endocrine functions of the kidney.

It is known that the kidney responds to different stimuli and secretes many substances which exert their effects on target organs. If such a role can be accepted as that of an endocrine gland, then the kidney, indeed, has endocrine functions.

To date, at least five different hormone-like substances have been at least partially identified in the kidney. I shall focus attention on three of them: erythropoietin, renin, and prostaglandin A₁ (PGA) (medullin).

*Dr. Cioffi was released from active duty on 5 July 1972 and is presently Head, Home Dialysis Unit, Veterans Administration Hospital, Washington, D.C.

The opinions or assertions expressed in the above article are those of the author and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.

Erythropoietin

As early as 1906, using a somewhat crude assay in bled rabbits, Carnot and Deflandre described a serum factor which would increase erythropoiesis in normal animals. Evidence of the existence of a humoral erythropoietic factor was established when Reismann performed his study on parabiotic rats during a hypoxic stimulus. To date, the exact chemical nature of this substance has not been determined. However, its digestion by trypsin and its inactivation by sialidase suggest that it is a polypeptide with a carbohydrate component. It is thermostable, water soluble, and possesses a molecular weight of about 60,000. Increase in radioactive iron incorporation into the circulating red cells of plethoric mice is the somewhat insensitive, although standard bioassay procedure employed. Other parameters are too insensitive and nonspecific to be of value. It has been established by this procedure that such a compound increases the number and total volume of red cells.

The evidence that the kidney is the production site of this erythropoietic stimulating factor (ESF) is based on the following observations: First, polycythemia is associated with renal neoplasms and cysts. Second, the presence of anemia in chronic renal failure is predictable. Third, animals subjected to bilateral nephrectomy lack erythropoietic stimulating factor activity. Fourth, kidney homogenates possess erythropoietic-stimulating activity in amounts far greater than any other organ. The fact that anephric man can support red cell production in response to hypoxia indicates that an extra-renal production site does exist.

Hypotonic kidney extracts have been found to be inactive, however, when tested for erythropoietic stimulating activity. Erythropoietic activity increases when these extracts are incubated with serum from hypertransfused animals, thereby suggesting that the renal erythropoietic factor works as a catalyst or cofactor on a substance in normal serum. Further studies have demonstrated that this other substance is a globulin formed in the liver.

It has been shown that the three primary stimuli of red cell production — anemia, hypoxia, and cobalt, are all followed by a rise, both in the renal erythropoietic stimulating factor and in the liver globulin fraction, before any change in iron incorporation occurs. This suggests that the stimuli increase erythropoiesis by increasing erythropoietin production. There appears to be a direct correlation concerning the oxygen content of arterial blood perfusing the kidney, the oxygen affinity of its hemoglobin, and the amount of erythropoietin that can be assayed. Furthermore, only minor disturbances in the relationship between tissue oxygen tension and metabolic needs are associated with changes in erythropoietic stimulating factor activity.

Erythropoietin appears to act at the level of the committed stem cell, the pronormoblast, and not only initiates differentiation of this primitive cell, but also augments the rate of normoblast proliferation. It apparently does this by increasing DNA and, secondarily, RNA synthesis in hemopoietic tissue. Since maturation of red cell precursors depends on hemoglobin synthesis, erythropoietin must initiate and govern the rate of hemoglobin synthesis. Last, erythropoietin appears to hasten the shift of marrow reticulocytes into the circulating blood.

Unlike renin, the renal erythropoietic factor appears to be formed throughout the kidney. Furthermore, it is devoid of pressor properties; and its activity and production are enhanced by androgens, and depressed by estrogens.

Clinically, the highest titers of erythropoietin are found in the urine and the plasma of those patients

who present anemia secondary to erythroid hypoplasia, for example, aplastic anemia; the lowest titers appear in the uremic population, leading to under-production of red blood cells and anemia. However, the uremic state itself may inhibit ESF production, and this is suggested by the fact that impaired hematopoiesis and detectable levels of ESF have been noted in patients who have undergone dialysis. Furthermore, testosterone has been found to increase red blood cell production in uremic men, possibly by increasing ESF production. High titers are found in conditions of stress such as bleeding and hemolysis. In those disease states associated with an inhibition of iron incorporation such as carcinoma, infection, and systemic vasculitis, contradictory levels have been reported and further study is in progress.

Further insight into the nature and mode of action of erythropoietin awaits a more suitable assay procedure. Recent studies by Lange utilizing a hemagglutination-inhibition procedure have enabled many investigators to detect quantities of erythropoietin that escaped the bioassay procedure. Small but definite levels are found in normal serum and normal urine. Furthermore, antibody directed to erythropoietin has caused red cell hypoplasia in otherwise normal animals. These two facts have led to the postulate that erythropoietin is involved in the day-to-day regulation of erythropoiesis and accounts for the normal 1% reticulocyte count. Attempts at radioimmunoassay of ESF have been hampered by species specificity and, therefore, problems of antibody production.

Recently, renal ischemia, especially that preceding kidney-graft rejection, has been associated with an increase in erythropoietin production and polycythemia. In such patients, an associated finding has been the increased size of the juxtaglomerular (JG) cells. A determination of whether or not the JG cells are the site of origin of the renal erythropoietic factor awaits the results of immunofluorescent studies.

Renin

It has been recognized that the kidney harbors a substance which manifests pressor activity since 1898 when Tigerstedt and Bergman prepared an extract from rabbit kidneys and produced an elevation of blood pressure when it was injected into other rabbits. They called this substance renin. Interest in the substance was lost until 1934 when Goldblatt performed the classical experiments in which he induced sustained hypertension in dogs by partially constricting their renal arteries.

JG Index.

By the process of microdissection, fractionation of submicroscopic structures by centrifugation, and by immunohistologic studies, there is evidence that renin is a proteolytic enzyme synthesized or stored in the vascular pole of the glomerulus. The bulk of renin appears to be localized to the granular JG cells of the afferent arteriole, especially those of superficial cortical nephrons. Furthermore, numerous authors have demonstrated that the granularity of the JG apparatus changes in response to different stimuli. This change in JG granulation has been termed the "JG Index" and is directly related to renin secretion, as determined by electron microscopy studies of these granules, as well as by determining the amount of extractable enzyme.

The JG Index, or amount of renin extractable, is increased under the following circumstances: first, decreased effective blood volume as in cirrhosis or nephrosis; second, decreased renal perfusion pressure; third, adrenalectomy; fourth, edematous states; and fifth, following furosemide infusions, probably secondary to the sodium-depleting properties. The granularity is diminished following experimental salt loading, the administration of desoxycorticosterone acetate (DOCA), and during hypersecretion of epinephrine. Because of the diverse nature of stimuli and depressants, simple baroreceptors or chemoreceptors cannot be implicated as the sole sensing devices.

It appears now that renin acts on a protein substrate, an alpha-2 globulin produced in the liver, converting it into a physiologically inactive decapeptide, angiotensin I. Rapid conversion to the active agent, an octapeptide, angiotensin II, occurs *in vitro* by way of enzymatic cleavage of the decapeptide and occurs *in vivo* during one passage of angiotensin I through the lungs. The ability of plasma to generate angiotensin is the basis for the bioassay of plasma renin concentration. However, the rate at which this occurs is affected by other factors, such as substrate concentration; the presence of other inhibitors, activators or cofactors; and changes in pH and ionic concentrations. For this reason, effective plasma renin activity is a better concept in explaining peripheral influence of the active product while taking all other variables into account. Injection of the incubated plasma into a test animal results in a rise in blood pressure which is compared to that achieved by a standard dose of commercially-available angiotensin.

Plasma Renin Activity (PRA).

There is a fairly close correlation between renal renin content and renin release interpreted as plasma

renin activity. However, a change in renin concentration peripherally is not necessarily secondary to a change in the rate of renin release, for alterations in the clearance of renin and the inherent difficulties of any bioassay make interpretation difficult. Furthermore, acute requirements (acute volume depletion, for example) are associated with acute rises in plasma renin activity but are not associated with JG hypergranularity until 48-72 hours later, indicating a certain renin reserve to produce changes in peripheral renin activity. Intrarenal renin concentration undergoes slow adaptation. In chronic situations, however, the correlation between intrarenal renin content and plasma renin activity is closer than in acute situations. In salt-deprived animals, JG Index and plasma renin activity increase in parallel fashion. Renal ischemia, resulting from unilateral clamping of the renal artery, is associated with an elevation of kidney renin on the affected side, as well as an elevation of plasma renin activity in the venous effluent of that kidney. On the unaffected side, renal ischemia is associated with a decreased intrarenal renin concentration and a decreased plasma renin activity in the venous effluent. A renal vein renin ratio greater than 2:1 in a hypertensive patient, with documented unilateral renal artery stenosis on arteriography, is the single most reliable test for predicting the success of operation to correct the hypertension.

In other types of hypertension, plasma renin activity (PRA) is variable. In essential hypertension, normal amounts of activity have been documented by many authors; however, in accelerated or malignant essential, or nonessential hypertension, elevated plasma renin activity occurs and is most likely secondary to the associated renal ischemia, since correction of the hypertension is associated with a fall in plasma renin activity. In hypertension secondary to renal parenchymal disease, PRA is usually normal. In interpreting these findings, however, the state of salt balance, body posture, and the effects of drugs, such as diuretics must be taken into account. Negative salt balance and the upright posture both augment renin release and, hence, plasma renin activity. Estrogens cause an elevation in substrate concentration and thus increase angiotensin formation, clarifying, in part, the increased blood pressure observed with ingestion of oral contraceptives. Hypertensive patients, as a group, will respond to low-salt diets and upright posture with an increase in both plasma renin activity and aldosterone production. Furthermore, there is a strong positive correlation between JG Index, PRA and aldosterone production, with the notable exception being primary aldosteronism. In addition, angiotensin infusion causes a

dramatic rise in aldosterone secretory rate. Renin alone is devoid of this activity. These facts have been interpreted to mean that the renin-angiotensin system is the prime regulator of aldosterone production. The release of aldosterone serves as a negative feedback mechanism by increasing salt and water reabsorption in renal tubules, thereby expanding plasma volume and increasing renal perfusion pressure which then decreases renin secretion.

The conceived role of the macula densa in governing renin secretion has been controversial. Thirumangalakudi has held that increased luminal sodium concentration in the area of the macula densa causes increased renin release, vasoconstriction, and decreased glomerular filtration rate, so-called autoregulation. Vander has argued that the opposite is true. Unfortunately, sodium balance has not been controlled; therefore, it is not yet possible to make definitive statements. In an effort to compromise both of these views as well as to utilize the renin-angiotensin system to explain autoregulation of renal blood flow and glomerular filtration rate, the following hypothesis has been proposed. It depends on an increased sodium concentration in the early distal tubule, for example, in salt-loaded states, activating a sodium-dependent carrier to transport renin from the granules of the JG apparatus to the cytoplasm of the afferent arteriolar wall. Cytoplasmic renin reacts with substrate on the wall of the afferent arteriole to produce an increase in local angiotensin production and, hence, an increase in arteriolar tone. When sodium concentration in the macula is depressed, for example, when perfusion pressure is reduced, the local transport of renin into cytoplasm of the afferent arteriole is inhibited so that arteriolar tone decreases, subserving autoregulation. When the local transport is depressed, renin accumulates and is discharged into the efferent arteriole, and systemic plasma renin activity increases.

Just as the kidney possesses pressor properties, so does it also possess antipressor properties. Angiotensinases (aminopeptidases), which degrade the formed angiotensin II are formed by the kidney. This fact accounts not only for the short biological half-life of angiotensin II, but also for the difficulty in developing a radioimmunoassay. For with conversion of angiotensin I to angiotensin II *in vitro*, more angiotensinase is produced. To circumvent this difficulty, a radioimmunoassay for angiotensin I has been developed that more closely parallels plasma renin activity, and that is now being used for the determination of PRA in most laboratories.

In addition, the following facts point to the localization of renin inhibitor in the kidney: After bilateral nephrectomy, animals demonstrate an increased

response both to renin and to angiotensin infusions and this response may be negated by the transfusion of plasma from normal animals. Furthermore, renin added to the blood of nephrectomized animals generates angiotensin at a faster rate than does an equal amount added to normal blood *in vitro*. A phospholipid has been isolated from the kidney which inhibits the interaction of renin and substrate and which, *in vivo*, decreases the pressor response to injected renin.

Prostaglandin A₁ (PGA₁)

The importance of intact functional renal mass in "protecting" against various forms of experimental renal hypertension, such as partial renal artery occlusion or chronic compression of the renal parenchyma, is well established. For example, Goldblatt's experiment would not produce hypertension in some animals unless contralateral nephrectomy were performed. Introduction of a normally-perfused non-excretory kidney into the circulation, in experimental and clinical renal and renovascular hypertension, is associated with a decrease in blood pressure. Lee and Thorn showed that crude renal medullary extract produced a fall in blood pressure in the cat, and that this vasodepressor substance was not identical to adenosine triphosphate or bradykinin. They further characterized this material as a lipid identical to prostaglandin A₁ which, although not produced uniquely by the kidney, is found in highest concentration in the medulla of the kidney. This substance is not a renin inhibitor in that it does not alter angiotensin generation rate *in vivo* or *in vitro*. It acts on peripheral arterioles, producing direct vasodilatation with resultant diminution of peripheral resistance and mean arterial blood pressure. In addition, renovascular dilatation leads to: increased total renal blood flow, especially to the cortical area; increased urine flow; increased sodium excretion; and increased free-water clearance.

Although a role for PGA₁ in man has not been established, it is conceivable that PGA may act systemically or locally. A deficiency may produce relative cortical ischemia, may allow increased renin production, and may produce hypertension. Alternatively, a deficiency may lead to generalized vasoconstriction and systemic hypertension. Lee *et al* recently utilized purified PGA₁ in treating patients with essential hypertension. At low infusion rates, the anticipated increase in renal plasma flow, glomerular filtration rate, urine flow, and in sodium excretion occurred without change in blood pressure. At higher doses blood pressure fell, although the previously-mentioned changes were not seen, suggesting that decreased renal

perfusion was secondary to decreased arterial pressure and offset the direct vasodilating and natriuretic properties of PGA.

SUMMARY

A number of hormone-like substances have been isolated from the kidney. Erythropoietin is a bone marrow stimulant, responsible for the day-to-day regulation of red blood cell production. Both renin and prostaglandin A₁ appear to be involved in the control of systemic blood pressure and, possibly, also in the autoregulation of renal blood flow.

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HIPPOCRATIC PLANE TREE

The Tree of Hippocrates has long been a symbol to those who seek the truth in medicine. With this thought in mind, RADM Felix P. Ballenger, MC, USN, Commanding Officer, National Naval Medical Center (NNMC), Bethesda, Md., planted a sapling which was grown from a seed obtained from the giant plane tree under which Hippocrates taught medicine.

The seedling was given to Dr. Ballenger by Dr. Truman G. Blocker, President of the University of Texas Medical Branch, Galveston, Tex., when Dr. Ballenger was honored by receipt of the University's distinguished alumni award. The seedling was nurtured until ready for planting at the National Naval Medical Center (NNMC).

In an appropriate ceremony, the seedling was finally planted at NNMC, in a location which will hopefully provide inspiration for all the future students of medicine that will be enrolled in the various schools and training courses at the Center.

The parent tree, which is believed to be over 2,500 years old, still stands today on the Greek Island of Cos in the Aegean Sea. The original plane tree is a cherished shrine of physicians, and formed the setting in which Hippocrates instructed his students.—PAO, NNMC, Bethesda, Md.



PLANE TREE SEEDLING—Turning the first spadeful of earth at a planting of a seedling from the tree of Hippocrates is RADM Felix P. Ballenger, MC, USN, CO, NNMC, Bethesda. Mr. George Stant (far left), Public Works Dept., NNMC, saw that the seedling prospered for the first year at Bethesda. Others who observed the planting are, from left to right: RADM D.P. Osborne, MC, USN, Assistant Chief for Personnel and Professional Operations, BUMED; CAPT Paul Kaufman, MC, USN, CO, Nav Hosp Jacksonville, Fla; LCDR D.J. Monarch, CEC, USN; Mrs. Mayme Ballenger; Jane Ballenger (behind her father); and CAPT W.C. Wohlfarth, DC, USN, former CO, Naval Graduate Dental School, NNMC, Bethesda.—PAO, NNMC, Bethesda, Md.



THE CARDIOLOGISTS' CORNER

HORMONES and the HEART: HYPOTHYROIDISM

By CDR Carl R. Bemiller, MC, USN;* and
LCDR Carl J. Pepine, MC, USN;†
Naval Hospital, Philadelphia, Pennsylvania.

INTRODUCTION

Since hormones are regulators of growth and metabolism, it would be logical to expect that such regulation might include these processes within the heart. Although numerous studies on the effects of hormones on cardiac growth and function have been made, the explanations given for the varying clinical and pathologic states associated with endocrine dysfunction are not altogether lucid. Difficulty arises because the non-cardiac effects of hormones may indirectly modify circulatory responses, making interpretation of the effects on the heart extremely complex. In this review we will attempt to isolate and clarify some primary, direct endocrine effects on the heart that appear to be clinically important.

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The opinions or assertions expressed in the above article are those of the authors and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.

THE HEART IN HYPOTHYROIDISM

Myxedema Heart.

Myxedematous heart disease as a distinct clinical entity was first suggested by Zondek in 1918 and supported by Fahr in 1925, and Lerman and associates in 1934.¹⁻³ They described the enlarged heart with "slow, indolent action," slow pulse rate and low voltage electrocardiograms. The term "myxedema heart" was coined, implying that the condition was the direct result of thyroid deficiency and reversible with thyroid hormone replacement. Cardiac enlargement, they felt, was solely the result of generalized cardiac dilatation. Recently, however, several other mechanisms have been suggested as a basis for cardiomegaly associated with myxedema. These mechanisms, in addition to generalized cardiac dilatation, include pericardial effusion and other associated cardiac disease acting separately or in combination.

Generalized Cardiac Dilatation.

Formerly clinicians believed that cardiomegaly resulted from generalized cardiac dilatation and they

were supported by rare pathologic reports. Schulty described a 12-year-old girl with congenital athyreosis,⁴ with generalized cardiac dilatation; but no pericardial effusion, associated coronary artery disease, or other cardiac abnormalities. Histologic changes were nonspecific, consisting of interstitial edema, basophilic infiltration of the myocardium, loss of striation, vacuolation, degeneration, and necrosis of myocardial fibers. Similar cases in adults were described in which generalized cardiac dilatation was also found, in the absence of other cardiac abnormalities.⁵ The mechanism responsible for generalized cardiac dilatation in myxedematous patients remains obscure, but it is reversible with thyroid replacement therapy.

Pericardial Effusion.

In 1929 Gordon reported the first case of pericardial effusion in a patient with myxedema.⁶ As numerous other cases of pericardial effusion in patients with myxedema were subsequently described, it became apparent that pericardial effusion was a "constant, early, and major factor" in the causation of cardiomegaly in myxedema.⁷ (See Figure 1) Effusion may be the only identifiable cause of cardiomegaly or it may also be accompanied by a significant degree of generalized dilatation.⁸⁻⁹

The effusion is usually serous and variable in amount, within a range in specific gravity from 1.012 to 1.025. Total protein content is usually high; cholesterol content is normal or elevated. Minimal cellular elements with lymphocytes predominating and negative bacteriologic studies are typical. The mechanism for effusion formation remains unknown. Other serosal surfaces, such as the peritoneal and pleural cavities, may be

involved. Histologic evidence of pericardial injury or inflammation is absent. Two factors are possibly related to this phenomenon: a marked increase in capillary permeability and/or abnormal renal function, frequently demonstrated in myxedema.¹⁰⁻¹¹

ASSOCIATED CARDIAC ABNORMALITIES

Occasionally cardiomegaly in myxedema may be caused by associated cardiac abnormalities (i.e. coronary, hypertensive or rheumatic heart disease). Modern diagnostic studies such as cardiac catheterization, selective angiography and echocardiography frequently elucidate the cause of the cardiomegaly. Occasionally, a therapeutic trial of thyroid replacement therapy is necessary to isolate more clearly the separate causes of cardiomegaly in the myxedematous patient. Cardiomegaly that is secondary to coincidental cardiac abnormalities will not disappear, whereas the heart will return to normal size in myxedema heart disease. (See Figure 1)

Congestive Heart Failure.

Heart failure rarely occurs independent of other associated intrinsic cardiac disease, although controversy exists as to whether or not myxedema heart disease alone causes congestive failure. Generally, congestive heart failure is frequently thought to be present in myxedematous patients who present cardiomegaly and occasionally manifest pitting edema of the lower extremities, pleural effusions, low cardiac output and a prolonged circulation time. Digitalis therapy in these patients has been found to be of no value however, and further hemodynamic and physiologic studies fail

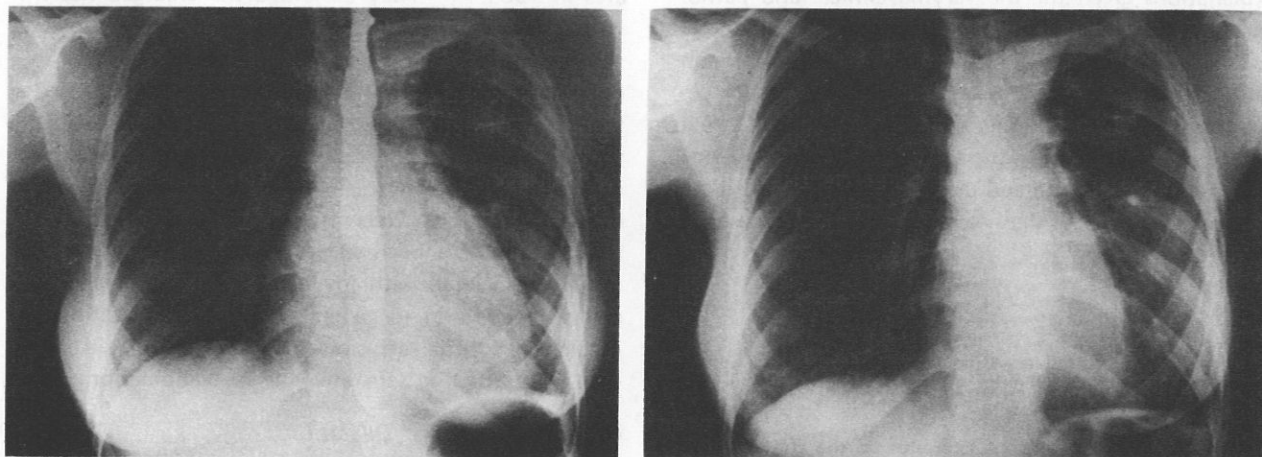


Figure 1.—Chest X-ray of 38-year-old female. A) Myxedema heart and protein-bound iodine (PBI) value of 1.1 microgram/100 ml. B) Normal-sized heart, six months after thyroid replacement therapy.

to reveal findings consistent with congestive heart failure. Lowered body metabolism, reflected by decreased oxygen usage, is accompanied by appropriate decrements in peripheral oxygen flow (cardiac output). In myxedema, reduced cardiac output does not necessarily indicate myocardial pump failure.

Other studies reveal normal cardiovascular pressures at rest and during exercise, in myxedematous patients with cardiomegaly. Such patients, in apparent congestive heart failure, have also been reported to produce a normal response to Valsalva's maneuver. These hemodynamic findings argue strongly against left ventricular failure as a cause of cardiomegaly in these patients.¹² A prerequisite for normal pressure and heart rate responses to the limitation of ventricular filling, imposed by increased intrathoracic pressure during Valsalva's maneuver, is a significant reduction in ventricular size (fiber length). As a result of Frank-Starling effects, there is a decrease in stroke output (and in systolic and pulse pressures), with a normal response to Valsalva's strain. Such changes do not occur in ventricles (hypervolemic, or less compliant normovolemic ventricles) operating over steep portions of their pressure-volume curves. Furthermore, as implied by the normal Valsalva response, the reported myxedematous infiltration of the myocardium may not seriously impair ventricular distensibility. Although measurements of left ventricular volume have not been reported, circulating blood volume is normal or slightly diminished in myxedema patients.

Thus, although myxedematous patients may have manifestations that superficially resemble those of congestive heart failure, there is strong evidence mitigating against a significant role for congestive heart failure in view of the above considerations, the lack of response to digitalis therapy, and complete reversibility with adequate thyroid replacement.

Hypertension.

Occasionally hypertension occurs in myxedematous patients. The pathogenesis remains unknown, but normotension occurs following specific thyroid replacement therapy. Although controversy exists concerning the relationship between coronary atherosclerotic artery disease and myxedematous patients, it does appear that hypertension may enhance the severity and extent of coronary artery disease when present in such individuals.¹³

EKG Changes.

The electrocardiographic changes are very constant in myxedema heart disease and consist of sinus bradycardia, low voltage and flattening or inversion of T

waves, with restoration to normal following thyroid replacement therapy. The pathophysiologic basis for these changes remains unknown, but may be attributed in part to changes in intracardiac water balance and/or an accompanying effusion.

THE R A P Y

Thyroid hormone is the specific treatment for myxedema heart disease and is administered in the form of thyroid extract, levothyroxine (T_4), or 1-triiodothyronine (T_3).¹⁴⁻¹⁵ In elderly patients and in those with angina pectoris or other cardiac disease, it is important to begin with a small dose of thyroid hormone and increase it gradually by small increments. The patient's response to treatment should be monitored by objective tests as well as clinical manifestations.

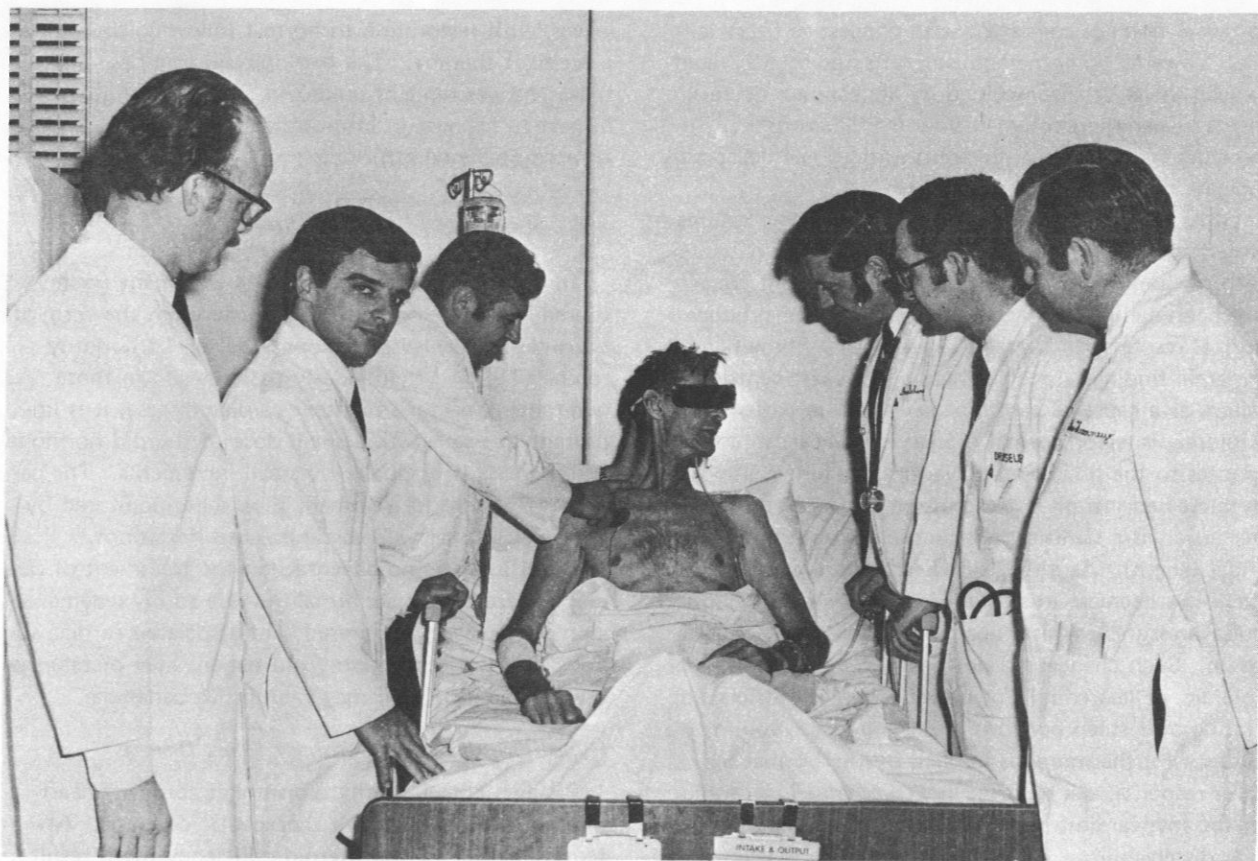
Digitalis offers no advantage in the treatment of cardiac or circulatory abnormalities due to myxedema alone. However, the presence of associated cardiac abnormalities in the hypothyroid patient may dictate the use of digitalis which may then prove beneficial.

Hypothyroidism and Coronary Heart Disease.

Patients with hypothyroidism and coronary heart disease present a difficult therapeutic dilemma. Attempts to correct the thyroid deficiency often result in exacerbation of signs or symptoms associated with coronary heart disease. Recently D-thyroxine has been used to achieve a significant calorogenic effect at the expense of minimal cardiac stimulation.¹⁶

Myxedema Crisis.

Patients with myxedema crisis (coma or deep stupor) often present complicated and challenging cardiovascular problems. A number of fatal cardiovascular complications may be precipitated during treatment of patients with myxedema coma. Death is usually preceded by the occurrence of severe *angina pectoris*, *myocardial infarction*, *acute left ventricular decompensation*, or *serious arrhythmias*. Rapid atrial fibrillation or intractable ventricular tachycardia have been reported most commonly. The terminal state is characterized by refractory *shock*. Most of these deaths have been reported shortly after the intravenous administration of T_3 . It should be remembered that the cardiac effects of T_3 are manifest in electrocardiograms obtained within four hours after intravenous administration; maximal effect occurs after approximately 24 hours. The half life of triiodothyronine is two and one-half days. The cardiac effects of T_4 lag behind those of T_3 from approximately 24 hours for a minimal effect, to about eight days for maximal



CDR Bemiller makes ward rounds with the Cardiology Staff. Standing (from left to right) are Drs. Rogers, Pepine, Bemiller, Schang, Fuselier, and Kearny.

action, with a half life of 6-12 days. On this basis, and the fact that most patients who have survived myxedema coma received T_3 , the efficacy of T_3 is well-established.¹⁷⁻¹⁹ Continuous monitoring for cardiac ill effects is mandatory following administration of T_3 , and the intravenous route must be avoided. Since the absorption of T_3 in the gastrointestinal tract is rapid and complete, there is little need to consider parenteral administration.

Shock and Bradyarrhythmias.

Patients with myxedema presenting in shock or with bradyarrhythmias present another problem in management. When considering the use of catecholamines in these situations, it is important to bear in mind that a potential synergistic effect may occur when these agents are administered concomitantly with thyroid hormones. Others have demonstrated that the vasopressor action of catecholamines increases more than twofold in this setting.²⁰ Chronotropic and inotropic actions are also enhanced and these effects are maximal in the presence of adrenocorticoids, which are likely to be

administered simultaneously with thyroid hormone in patients with myxedema, to avoid acute adrenal insufficiency. In view of these effects, it is prudent to administer only small doses of catecholamines when indicated (for shock or severe bradycardia), with continuous electrocardiographic monitoring as T_3 is given orally. It would be wise to have specific sympathetic blocking agents at hand in anticipation of possible adverse effects.

Hyponatremia.

Acute cardiac decompensation has also been observed when vigorous therapy has been administered to correct the hyponatremia of myxedema. It should be emphasized that this does not represent an absolute reduction in sodium and is probably related to absorption by excess hyaluronic acid in the ground substance of connective tissue. Since serum sodium levels usually rise after adequate thyroid hormone replacement therapy, and administration of large amounts of sodium chloride may be harmful, there is usually no clinical need to correct this seeming salt deficit.²¹⁻²²

SUMMARY

Selected clinical problems in patients with hypothyroidism and heart disease have been reviewed. Management of these clinical situations and their possible pathogenesis has been outlined. In future articles scheduled to appear in this series, other hormonal influences on the cardiovascular system will be discussed.

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NEW SURVIVOR BENEFIT PLAN

The long-awaited Survivor Benefit Plan was signed into law by the President on 21 Sept. Under the new plan, widows of retired or retirement-eligible servicemen will be able to receive a maximum survivor benefit of up to 55% of the serviceman's retirement pay. Unless they specify otherwise, future retirees will automatically be covered by the program. Personnel who are retired now have one year in which to join. The new plan will replace, at a lower cost, the Retired Serviceman's Family Protection Plan (RSFPP) presently available. Future retirees will no longer be eligible to participate in RSFPP. Current participants will be allowed to continue or drop RSFPP for the new plan, or also combine the two survivor programs, provided the total benefits do not exceed 100% of the serviceman's retirement pay.—CHINFO Newsgram (37-72). 🍀

Baby Bottle Caries

By LCDR Sheldon M. Bernick, DC, USNR-R,*
1230 Burmont Road, Drexel Hill, Pennsylvania.

Dental caries in children under three years of age is not uncommon. Carious lesions on buccal, lingual, and occlusal surfaces of the molars; labial surface of the cuspids; and labial and lingual surfaces of the maxillary incisors characterize "baby bottle caries." In my practice an average of two patients each week present this syndrome. The age range involved is from 18 months to four years.

These children are often referred by the dentist or physician who suggests the diagnosis of enamel hypoplasia or amelogenesis imperfecta. The desire for professional care is usually precipitated by the mother's concern over the discoloration of the teeth, or the development of local pain or dental infection. A mistaken diagnosis may infer that the carious lesions are caused by nutritional disturbances, physical disease or drugs. The latter conditions are possible causes of caries susceptibility in teeth, but very rarely is such

the case, and this particular pattern of decay does not result.

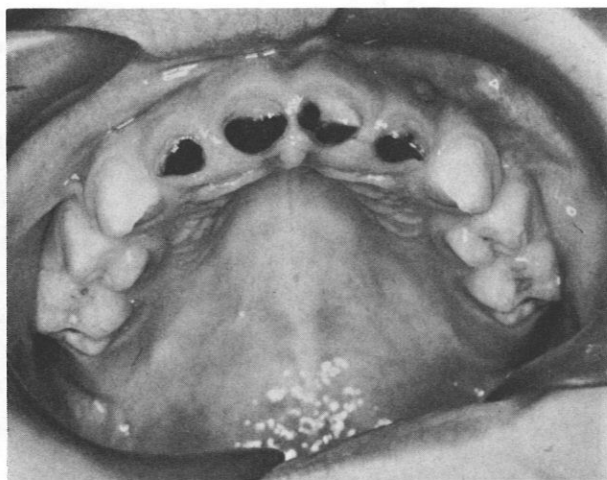
The prime cause of this entity is prolonged bottle feeding beyond one year of age, when the child should be eating solid foods. Such a child may be eating normal meals without a bottle, but in order to pacify him at nap and bedtime, and to prevent crying at other times, he is given a bottle containing milk, sweetened juices or even sweet tea. The child falls asleep while sucking and some milk or juice remains pooled around the teeth. This carbohydrate-rich liquid forms an ideal substrate for bacterial-induced cariogenesis.

The parents usually express surprise that the contents of the bottle can cause such extreme destruction of the teeth. They may even question why their family physician failed to counsel them on such a vital point. At the one-year-old physical examination, one routine question ought to be, "Does the child still drink from the bottle?" Some parents have said that their child still takes a bottle at age three years, and even one as old as 6 years.

The maxillary incisor teeth are most affected, with less noticeable changes involving the maxillary and mandibular molars and canines. The lesion is most pronounced on the smooth surfaces of the teeth near the gingival crevice. It is felt that the position of the

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The opinions or assertions expressed in the above article are those of the author and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.



Case I.—This 2½-year-old female was still drinking from a bottle containing high-carbohydrate fluids (apple juice) at naps and bedtime. Note the heavily eburnated dentin on the anterior teeth, a fistula above the upper left lateral incisor, and the beginning caries on partially-erupted primary second molars.

tongue, nipple of the bottle, and the saliva issuing from Wharton's ducts, act to protect the mandibular incisors. The diagnosis is suspected from the appearance and distribution of the carious changes; it is confirmed by obtaining a positive history of protracted use of the nursing bottle. The primary sequelae are: 1) limited intake of solid food which is significantly corrected by cessation of bottle feeding; 2) immature speech patterns which improve when the carious teeth are restored with crowns, or replaced with dentures.

It is very difficult to restore primary maxillary incisors with large carious lesions. If the dental pulp is not affected, acrylic or stainless steel crowns can be

placed. Infected teeth should be removed. Some type of fixed or removable partial denture should be placed to restore mastication and speech functions because the permanent teeth in this area will not erupt until seven or eight years of age.

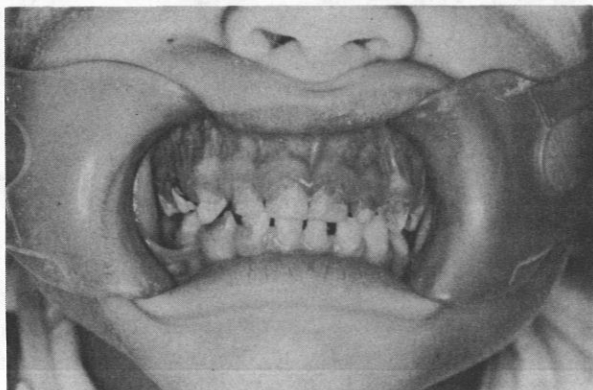
To prevent this type of carious attack it has been suggested that dental examinations begin at the age of 18 months, instead of the customary age of three years. Brushing of teeth should commence at 18 months of age and the excessive intake of sucrose-containing foods and between-meal snacks should be reduced or eliminated.



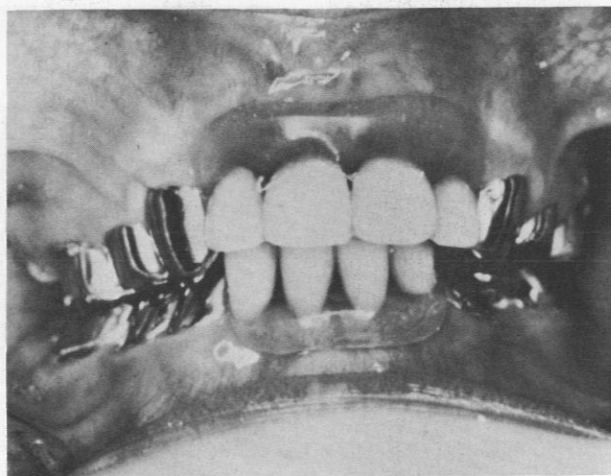
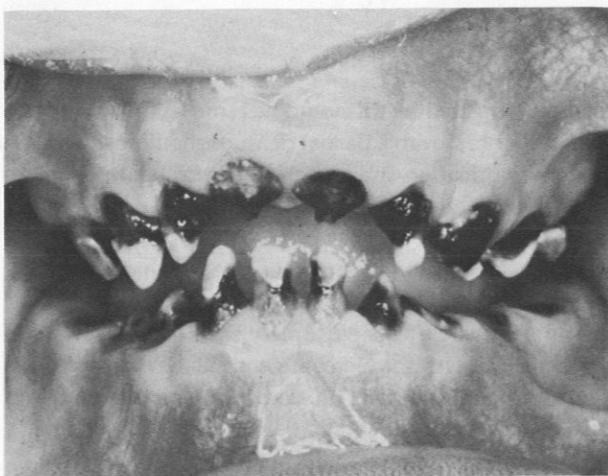
Case III.—A 3-year-old male was sucking from a bottle (with juices) until age 2½ years. Note the extreme destruction of the anterior teeth by smooth-surface caries and the collapsed bite which results from almost total destruction of the primary first molars.

Physicians can help by introducing this routine question in the annual physical examination: "At what age did your child stop taking the bottle?" If the child is still drinking from the bottle, parents should be counseled about the risks of prolonging this practice.

The form of dental caries induced in young children by prolonged use of the bottle is not a newly recognized entity. Pediatricians and dentists should guide and counsel parents in the prevention of this condition. Instructions in oral hygiene, diet control, withdrawal of the nursing bottle, and restoration and replacement of carious and missing teeth should be included in parental guidance.



Case II.—This 3-year-old male was still using the bottle. Note the extreme destruction of the upper incisors and molars along the gingiva. The lower incisors are virtually free of caries as is typical in the Baby Bottle Syndrome.



Case IV.—This 4-year-old male still drank from the baby bottle at bedtime and during the day. A) This habit coupled with a very poor diet resulted in complete destruction of all teeth. B) Restoration included pulpotomies and stainless-steel crowns on all primary molars and cuspids except for the lower left first molar which was extracted. The anterior teeth were removed and replaced by a fixed lingual arch denture to aid in speech, mastication and space guidance.

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Staff tours SS BANG—Members of the staff at Nav Hosp Portsmouth, N.H., recently toured the SS BANG (SS-385) at the Portsmouth Naval Shipyard. Pictured on the occasion are (from left to right): CDR JD Harris, Commanding Officer, SS BANG; LT(jg) Christine Patton; LCDR Edith Bowen; LCDR James Hoehn; LT Neal Ganz; ENS Robert Sloan; and LT(jg) Carson Labelle.—AO, Nav Hosp Portsmouth, N.H.

DISPENSING LIGHT-SENSITIVE MEDICATIONS *

By CDR Ralph D. Chansky, MSC, USN
Chief, Technical Services Branch;
Directorate of Medical Materiel,
Defense Personnel Support Center,
Philadelphia, Pennsylvania.

Until recent years, drug manufacturers and distributors were responsible for insuring that drug products which exhibited light-sensitive tendencies were properly packaged. In the past, pharmacists have been exempt from the United States Pharmacopeia (USP) requirement that light-resistant containers should be used when specified in the USP monograph. Thus, many light-sensitive preparations, particularly those in solid dosage forms, were adequately protected on the pharmacists' shelves; but after removal of the drug from the original container and dispensing to patients, the desirable degree of light-resistance protection was not being provided in many instances.

REGULATION CHANGE

In order to ensure protection of light-sensitive drug

products, the exemption previously afforded the pharmacist was deleted by a change to USP XVIII and pharmacists were so advised by the United States Pharmacopeia, Pharmacy Board Bulletin, dated 8 January 1971. Pharmacists must now follow the requirements of individual USP monographs and dispense drug preparations in containers that "protect the contents from the effects of incident light by virtue of the specific properties of the material of which it is composed, including any coating applied to it."

FEDERAL SUPPLY CATALOG ITEMS SOLID MEDICINALS

The following official (USP or NF) medicinals contained in the Federal Supply Catalog require protection from light as specified for each solid dosage form and as required by individual monographs in the United States Pharmacopeia or National Formulary (USP or NF):

6505

-985-7301 Acetaminophen Tabs

*Rapid changes can occur in this listing, and undoubtedly some alterations have been made since this manuscript was prepared for publication. Readers are advised to check appropriate references for up-to-date information.

- 108-3505 Ascorbic Acid Tabs
- 891-7555 Ascorbic Acid Tabs
- 660-1798 Benzonatate Caps
- 926-8929 Chloral Betaine Tabs
- 059-9018 Chlordiazepoxide HC1 Caps
- 059-9017 Chlordiazepoxide HC1 Caps
- 059-9019 Chlordiazepoxide HC1 Caps
- 022-1326 Chlorpromazine HC1 Tabs
- 022-1327 Chlorpromazine HC1 Tabs
- 935-9820 Chlorpromazine HC1 Tabs
- 998-5872 Clofibrate Caps
- 687-4053 Colchicine Tabs
- 926-9032 Dapsone Tabs
- 926-9033 Dapsone Tabs
- 783-7218 Diazepam Tabs
- 900-0900 Diazepam Tabs
- 117-4912 Ephedrine Sulfate Caps
- 299-8741 Ergotamine Tartrate & Caffeine Tabs
- 153-9720 Ergotamine Tartrate Tabs
- 660-0107 Ethchlorvynol Caps
- 062-3336 Furosemide Tabs
- 876-7239 Haloperidol Tabs
- 082-2687 Heptavitamin Tabs
- 299-8280 Iopanoic Acid Tabs
- 299-9674 Isoniazid Tabs
- 132-6904 Isoniazid Tabs
- 126-9375 Meperidine HC1 Tabs
- 299-9516 Methimazole Tabs
- 764-3548 Methypylon Caps
- 890-1775 Methysergide Maleate Tabs
- 890-1840 Metronidazole Tabs
- 286-9869 Nitrofurantoin Tabs
- 685-4972 Nitrofurantoin Tabs
- 420-7715 Nitrofurantoin Caps
- 721-9383 Nonavitamin Tabs
- 660-0083 Norethandrolone Tabs
- 616-9129 Nystatin Tablets
- 616-9128 Nystatin Tablets
- 153-8699 Oleovitamin A&D Caps
- 299-8273 Primaquine Phosphate Tabs
- 159-5010 Primaquine Phosphate Tabs
- 022-1328 Prochlorperazine Maleate Tabs
- 551-8682 Promazine HC1 Tabs
- 584-3277 Promethazine HC1 Tabs
- 926-4765 Pyrimethamine Tabs
- 290-0022 Reserpine Tabs
- 139-5000 Riboflavin Tabs
- 861-0867 Sodium Aminosalicilate Tabs
- 982-4230 Sodium Warfarin Tabs
- 982-4229 Sodium Warfarin Tabs
- 926-8996 Spironolactone Tabs
- 146-2200 Sulfadiazine Tabs
- 765-0582 Sulfamethoxazole Tabs

- 146-4425 Sulfasoxazole Tabs
- 780-3434 Triethylperazine Maleate Tabs
- 982-9143 Triameterene Caps
- 022-1336 Trifluoperazine HC1 Tabs
- 022-1337 Trifluoperazine HC1 Tabs
- 022-1338 Trifluoperazine HC1 Tabs
- 180-5973 Trifluoperazine HC1 Tabs
- 935-9826 Trimeprazine Tartrate Tabs
- 261-7267 Vitamin A Caps

CONTAINERS

To satisfy the requirement for dispensing certain medicinals in light-resistant containers, the medical services through the Defense Medical Materiel Board have type classified as standard the following light-resistant containers for *tablets and capsules*:

Bottle, Snap On Cap, Light-Resistant Plastic

- 6530-043-1015 5 Dram
- 043-1016 7 Dram
- 043-1020 10 Dram
- 043-1097 13 Dram
- 043-1179 20 Dram
- 043-1191 30 Dram
- 043-1193 40 Dram

Bottle, Press-Lug Lock Cap Light-Resistant Plastic

- 6530-042-8416 4 Dram
- 042-8421 7 Dram
- 042-8441 12 Dram
- 042-8443 16 Dram
- 042-8471 20 Dram
- 042-8472 30 Dram
- 042-8525 40 Dram

Bottle Screw Cap, Tablet & Capsule

- 6530-408-3520 2 Dram

The above items will replace the below-listed clear plastic bottles:

Bottle Snap On Cap

- 6530-926-2267 5 Dram
- 926-2268 7 Dram
- 889-9028 10 Dram
- 889-9027 13 Dram
- 926-2243 20 Dram
- 926-2244 30 Dram
- 926-2245 40 Dram

Bottle Press-Lug Lock Cap

- 6530-935-5842 4 Dram
- 935-5844 7 Dram
- 935-5843 12 Dram
- 935-5845 16 Dram

It should be noted, however, that both BOTTLE SNAP ON CAP, and BOTTLE PRESS-LUG LOCK CAP, plastic clear, "may be made light-resistant by means of an opaque enclosure."

LIQUID MEDICINALS

The following official (USP or NF) medicinals contained in the Federal Supply Catalog require protection from light as specified for each *Liquid Dosage Form* and as required by individual monographs in the USP or NF:

- 6505
- 285-2038 Acetyl Sulfisoxazole Oral Suspension
- 598-5830 Antipyrine & Benzocaine Sol
- 582-4735 Atropine Sulfate Ophthalmic Sol
- 153-8398 Belladonna Tincture
- 261-7257 Benzoin Tincture Compound
- 112-8975 Cascara Fluid Extract, Aromatic
- 753-4775 Chloroform
- 115-3360 Cottonseed Oil
- 619-8737 Diphenhydramine HC1 Elixir
- 958-6587 Diphenoxylate HC1 & Atropine Sulfate Solution
- 153-8225 Ether
- 064-8765 Glyceryl Guaiacolate Syrup
- 079-6269 Glyceryl Guaiacolate Syrup
- 153-8404 Glycyrrhiza Fluid Extract
- 153-8480 Hydrogen Peroxide Sol
- 721-8899 Hydroxyzine HC1 Syrup
- 082-2658 Nitrofurantoin Oral Susp.
- 153-8700 Oleovitamin A & D
- 132-3030 Paregoric
- 133-9920 Phenol
- 249-5285 Phenylephrine HC1 Sol

- 890-1093 Pyrvinium Pamoate Oral Susp.
- 128-5695 Thimerosal Sol
- 128-5705 Thimerosal Tincture
- 059-3497 Thioridazine HC1 Sol.

It should be noted that the above list does not include ophthalmic or otic solution supplied in containers of 30 ml or less. These items are normally dispensed in the original container and are packaged in light-resistant dropper bottles when appropriate and required.

CONTAINERS

The requirement for light-resistant containers for liquid medicinals may be satisfied by the following prescription containers:

Bottle Screw Cap

Prescription, Glass Amber

- 6530-982-4427 2 oz.
- 782-6431 3 oz.
- 982-4226 4 oz.
- 782-6432 6 oz.
- 982-4225 8 oz.

Bottle Dropper

Amber or Green

- 6530-502-3500 1/4 oz.
- 404-7500 1/2 oz.
- 404-7700 1 oz.
- 914-0239 2 oz.

AVAILABILITY

Bottle Screw Cap, Prescription, Amber, Bottle Screw Cap, Tablet and Capsule, Amber or Green and Bottle Dropper Amber or Green are currently available through the Federal Supply System. Availability of Bottle Snap-on Cap (Light Resistant) and Bottle Press Lug Lock Cap (Light Resistant) is announced through appropriate Navy bulletins. ☘



CAPTAIN SELECTEES



MEDICAL

Aaron, Benjamin L.
Anastasi, Gaspar W.
Bailey, David W.
Beasley, Walter E.I.
Becker, Matthew K.
Bemiller, Carl R.
Bishop, Robert P.
Blais, Bernard R.
Bloom, Joseph D.
Cantrell, Robert W.
Castell, Donald O.
Chappelka, Alfred R.
Conkey, George A.
Cowen, Malcolm L.
Cox, Jay S.
Deaner, Richard M.
*Dekrey, John A.
Dickson, Larry G.
Dolan, Michael F.
Dully, Frank E., Jr.
Elliott, Robert C.
Farin, Walter E.
Flynn, Peter A.
Gallent, James H.
*Gehry, Eugene L., Jr.
Goller, Vernon L.
*Grenier, Rodolphe A.
Harmon, Stanley D.
Herman, Clifford M.

*Reservists

Hodge, Warren W.
Hoeffler, Dennis F.
Hoke, Robert E.
Jones, Clyde W.
Kelley, Donald L.
Kerwin, Joseph P.
Lang, Jesse E.
Lawton, George M.
Leonard, John H.
Levy, Jerome
MacDonald, Rodney I.
Martin, George F.
Mathews, George W.
McDermott, William M., Jr.
Meehan, William L.
Miewald, John R.
Miner, Walter F.
Moquin, Ross B.
Myers, Robert C.
Norton, Richard H.
Ochs, Charles W.
Payne, Charles F.
Randall, Glenn H.
Robl, Robert J.
Rish, Berkley L.
Rivera, Julio C.
Russotto, Joseph A.
Sacks, Ellsworth J.J.
Salisbury, Edward M.
Sargent, Charles R.
Scott, Charles M.
Shepard, Barclay M.
Shute, Howard E.
Stanton, Kevin C.
Stenger, John R.
Swartz, Philip K.
Takaki, Norman K.
Thompson, Robert E.
Tobey, Raymond E.
*Wallace, Craig K.



DENTAL

Baker, Ronald D.
Barbor, Gerald L.
Bodine, Theodore A., Jr.
Brown, Kenneth E.
Charles, James H.J.
Collevecchio, Emidio J.
Coombs, Paul S.
Davidson, Richard S.
Eichel, Frederick P.
Firtell, David N.
Garver, Don G.
Herr, Albert
Kelly, James F.
King, Gordon E.
Klima, James E.
Little, Richard W.
McDonald, Edwin E., Jr.
McLaughlin, Edward J.
McLeod, Carlton J.
Moffitt, William C.
Nester, Calvin D.
Pepek, Stanley E.
Romaniello, Ronald M.
Sanderson, Alexander D.
Scott, William J.

Wirthlin, Milton R.J.
Witte, Ernest T.



MEDICAL SERVICE

Buckley, Emanuel N.
Dean, Jerdon J.
Gay, Laverne W.
Gill, Robert L.
Jula, Paul N.
Long, William L.
Longest, Clifford B.
Schlamm, Norbert A.
Wells, John E.
Wolf, John W.
Young, Johnny W.



NURSE

Osborner, Loah G. 🍂

USE AGREEMENT AT PENSACOLA

Cooperation between the Naval Aerospace and Regional Medical Center (NARMC) and the University of West Florida was expressed when officials of both organizations signed an agreement at the Mustin Beach Officers' Club on 5 Oct, permitting the University to use research facilities of the Center.

RADM Oscar Gray Jr., MC, USN and President Harold B. Crosby signed the agreement in the presence of NARMC and University participants. The agreement specifies conditions under which Department of Defense research facilities are made available.

Commenting on the use agreement, Admiral Gray said, "Using our research facilities will give us another opportunity to participate in community relations and cooperate with the University. We have had the pleasure of having students with us in the cooperative and directed study programs, and now we look forward to our new relationship with students and faculty members interested in research."—PAO, NARMC, Pensacola, Fla. 🍂

Armed Forces Seminar

on OB-GYN

The 21st Annual Armed Forces Seminar on Obstetrics and Gynecology (OB-GYN) and the 11th Annual Armed Forces District Meeting were held in conjunction with the meeting of the American College of Obstetrics and Gynecologists, 15-20 Oct 1972 at the SEA TAC Hilton, Seattle, Wash. The U.S. Army Madigan General Hospital in Tacoma, Wash., hosted the affair.

The Navy presented 19 papers at this worthwhile professional meeting; nine papers were authored by residents, and seven were presented by staff members on active duty.

Navy obstetricians received four of the nine awards which were presented for outstanding papers:

Host Award for the best presentation from a military hospital went to LT James Dewitt Woods, MC,

USN for his fine paper entitled "Human Parathyroid Interrelations in Pregnancy and Newborn Infants." Dr. Woods is a member of the staff at Naval Hospital Oakland, Calif.

Two Chairmans Awards went to Navy physicians. LCDR John L. Kitzmiller, MC, USN was lauded for an excellent paper, "Retarded Growth of *E. coli* in Amniotic Fluid." Dr. Kitzmiller is now at the University of California in San Francisco, formerly on the staff at Naval Hospital San Diego.

The second Chairmans Award went to LCDR Donald R. Tredway, MC, USN for his splendid paper, "Comparison of Serum and Urinary Estrogen Assays as Aids in Monitoring HMG Therapy." Dr. Tredway is presently in outservice training in endocrinology — obstetrics-gynecology at the University of Southern California in Los Angeles.



HOST AWARD — COL William Boyson (right, standing), Armed Forces District Chairman, bestows award for the best presentation from a military hospital upon the author, LT J.D. Woods, MC, USN (standing on left). Dr. Woods is a member of the staff at Nav Hosp Oakland. Seated at the table are: MAJGEN Maxwell Steel, Deputy Surgeon General of the U.S. Air Force (left); and Mrs. Richard Wilbur (right). (U.S. Army photo—PAO, Madigan General Hosp., Tacoma, Wash.)



CHAIRMANS AWARD — Accepting the honor for LCDR J.L. Kitzmiller, MC, USN is CAPT B.D. Viele, MC, USN (standing, left). (U.S. Army photo—PAO, Madigan General Hosp., Tacoma, Wash.)



CHAIRMANS AWARD — For one of the best clinical research papers in gynecology, COL William Boyson (standing, right), Armed Forces District, ACOG Chairman, presented award to LCDR Donald R. Tredway, MC, USN (standing, left). Mrs. Richard Wilbur is seated at table. (U.S. Army photo—PAO, Madigan General Hosp., Tacoma, Wash.)



LCDR Larry Stoneburner, MC, USN, 3rd year OB-GYN Resident at Naval Hospital San Diego, Calif., presented his paper, coauthored by LCDR John L. Kitzmiller. The paper was entitled, "The Complement System in Normal Pregnancy."

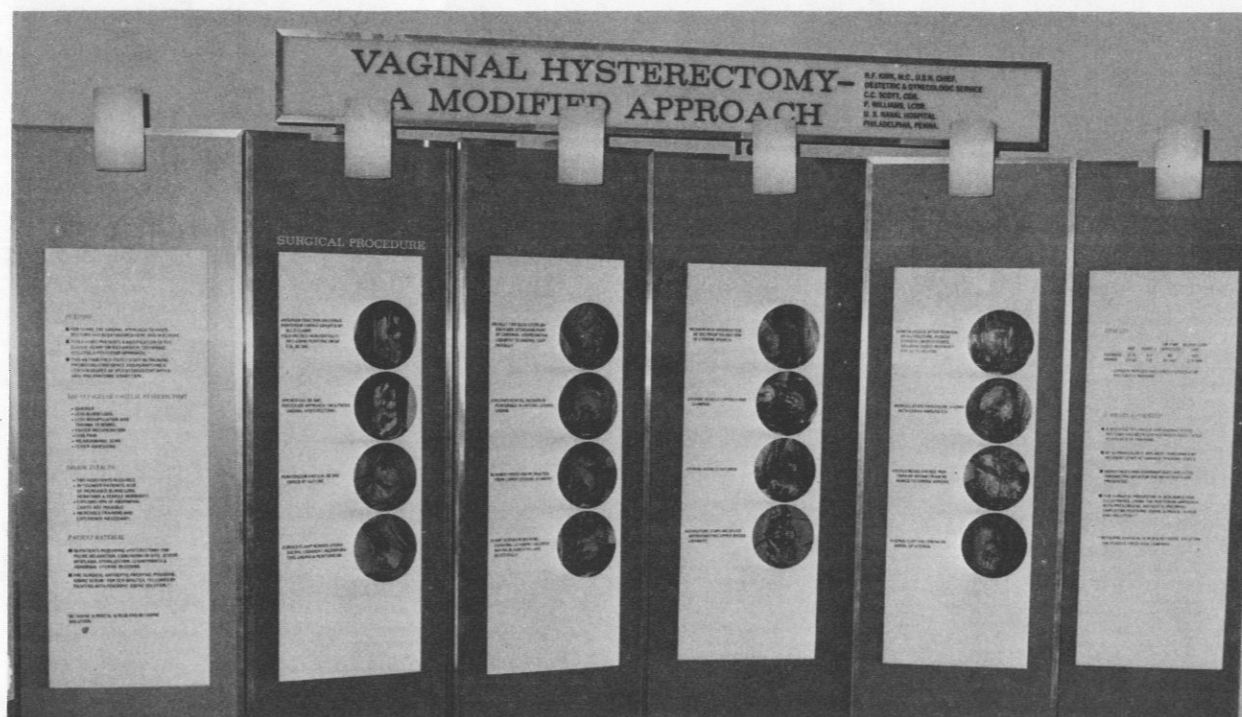


RESIDENTS AWARD — LCDR Mayo D. Gilson, MC, USN (right) received an award for his outstanding paper on Primary Amenorrhea. He is congratulated here by COL William Boyson (left), Armed Forces District, ACOG Chairman. (U.S. Army photo—PAO, Madigan General Hospital, Tacoma, Wash.)

LCDR Mayo D. Gilson, MC, USN was selected for a Residents Award. Dr. Gilson's interesting paper was entitled, "Primary Amenorrhea — a Simplified Approach to Diagnosis." Formerly a member of the staff of Naval Hospital, NNMC, Bethesda, Md., LCDR Gilson is presently located at Naval Hospital Memphis, Tenn.

An award-winning scientific exhibit was presented by the OB-GYN Service at Naval Hospital Philadelphia, Pa. The well-received display unit was entitled, "Vaginal Hysterectomy — a Simplified Approach." Responsible for the successful exhibit were: CAPT Robert K. Kirk, MC, USN; LCDR Paul Williams, MC, USN; CDR C.C. Scott, MC, USN; and LT John Yauch, MC, USN.

U.S. NAVY MEDICINE wishes to acknowledge the special efforts of Ms. Dorothy Hadwick; the U.S. Army photographers; and CAPT Robert K. Barton, MC, USN, Director of Professional Division, BUMED, in making this material available for publication — Ed.



Award-winning scientific exhibit was presented by the OB-GYN Service of Naval Hospital Philadelphia, Pa. (U.S. Army photo—PAO, Madigan General Hospital, Tacoma, Wash.)

AEROSPACE PHYSIOLOGISTS MEET

LT Thomas Cooper received the award for the outstanding physiologist of the year at the annual meeting of aerospace physiologists held at the Naval Aerospace Medical Institute on 17-19 Oct in Pensacola, Fla. LT Cooper is a member of the staff at the Naval Air Development Center, Warminster, Pa. Thirty-five naval aerospace physiologists attended the meeting.

Planning Committee Chairman CDR Morris J. Damato of Naval Air Systems Command, Washington, D.C., welcomed the participants and introduced the program.

The first paper, presented by Dr. Franklin A. Wittwer of the local University of West Florida, addressed new philosophies in education and training.

Other papers presented included: "Computer-Managed Instruction," "Performance-Centered Individualized Learner-Oriented Training," "Training Devices — Statistical Data Systems," "Water Survival Training," "Development of Emergency Escape Systems," "A Simple Effective, Do-It-Yourself Paratroop Training Device," "The Naval Aerospace Physiologist in the Ready Room," "The Functions of the Environmental Branch at the Manned Spacecraft Center," and "Aviators' Personal and Survival Equipment."

CAPT Clifford P. Phoebus, MC, USN (Ret.), a former commanding officer of the Naval Aerospace Medical Institute, was the guest speaker at a banquet held on 17 Oct in the Mustin Beach Officers' Club.

In addition to Dr. Wittwer, the following authors presented their papers: Mr. A. Johnson of NAS Memphis, Tenn.; LTJG Olin E. Walton Jr., Naval Aviation Schools Command; Howard C. Fish, Naval Aerospace Recovery Facility, El Centro, Calif.; LCDR Paul E. Toops, NAS Corpus Christi, Tex.; LT Don M. Herron, Naval Training Equipment Center, Orlando, Fla.; David J. Horrigan Jr., NASA, Manned Spacecraft Center, Houston, Tex.; and Jesse B. Hall, Naval Air Systems Command, Washington, D.C.—PAO, Naval Aerospace & Regional Medical Center, Pensacola, Fla.

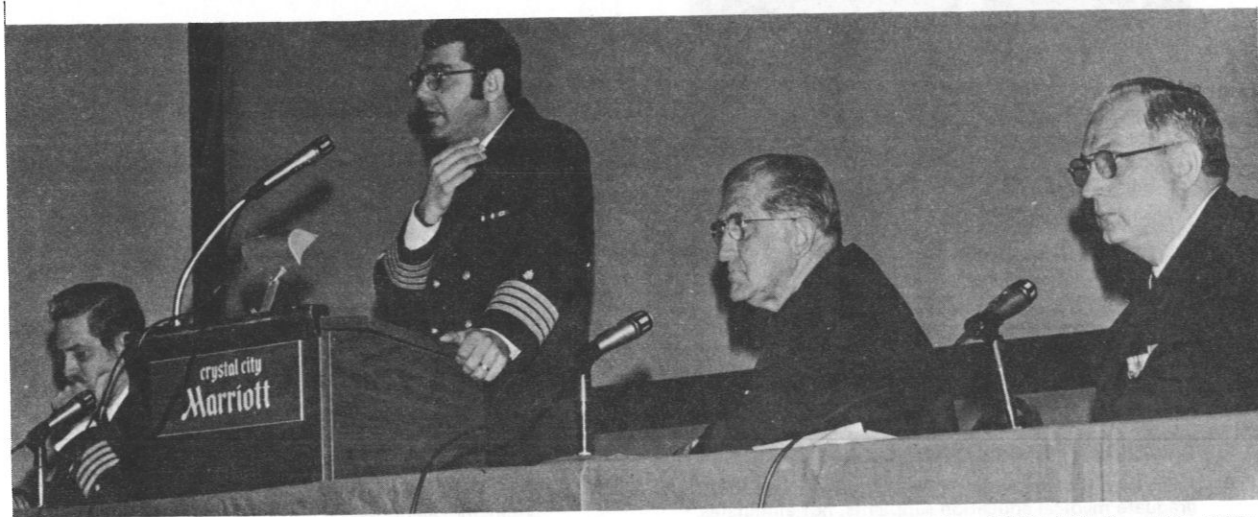
1972 Meeting of SAC

(Specialty Advisory Committees)

By the Professional Division,
Bureau of Medicine and Surgery, Washington, D.C.

A lively Fourth Annual Meeting of the Specialty Advisory Committees (SAC) took place at the Crystal City Marriott Motor Hotel, Arlington, Va., 10-14 Oct 1972. From naval hospitals throughout the country, 100 graduate medical training program directors

convened to assist in the selection of residents and fellows for the various specialty training programs which will begin during Fiscal Year 1974. The meeting also provided an opportune forum for a free exchange of ideas and exploration of constructive policy changes.



WE ARE GATHERED TOGETHER — Opening the first plenary session are, from left to right: CAPT J.W. Cox, MC, USN; CAPT M. Museles, MC, USN; RADM D.P. Osborne, MC, USN; and CAPT R.K. Barton, MC, USN.



Dr. Eugene A. Stead, Jr.—“The end point is lacking in medical education. There is none.”



RADM George H. Reifstein, MC, USNR.—Director of Clinical Investigation Program and Consultant for Medical Department Education and Training, BUMED.



CAPT S.G. Kramer, MC, USN.—“The Boston Plan for Improving Teaching Staffs.”

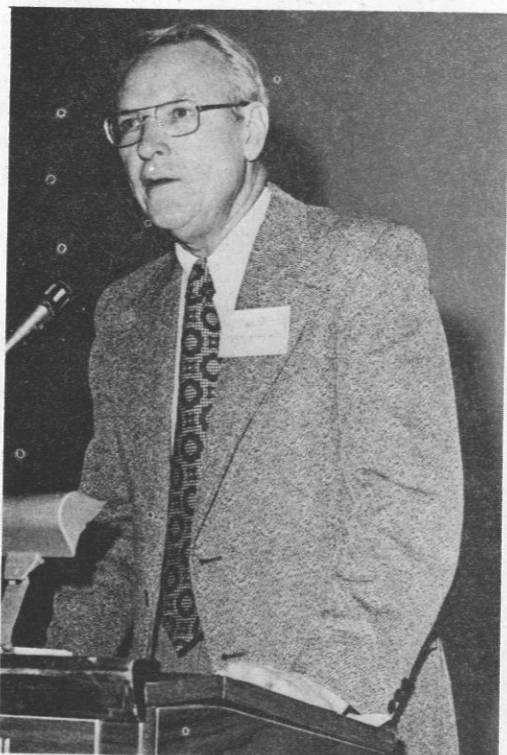
The initial one and one-half days were devoted to a consideration by the group of those topics and issues which impact upon all graduate medical education programs. The future scope of primary health care in the Navy received heavy emphasis. Invited speakers offered prepared talks, panel discussions addressed questions submitted from the floor, and attendees

were given the opportunity to interject their comments through microphones placed strategically about the floor.

Eugene A. Stead, Jr., M.D., Professor of Medicine at Duke University, Durham, N.C., set the tone of the meeting with a philosophical foray entitled “What Residency Training Is and What it Should Be.”

C.H. William Ruhe, M.D., Director of the Division of Medical Education of the American Medical Association outlined the increasing requirement for continuing medical education, and multiple tract systems. He reviewed the many new developments and concepts being implemented in medical and paramedical areas, noting that the military establishment was well geared to lead in these activities.

LCDR Donald M. Davidson, MC, USN from Naval Hospital San Diego, Calif., briefed the committees on the newly-formed “National House Staff Coalition.”



Dr. C.H. William Ruhe.—“The integrated year of graduate medical education supplants, not eliminates,” the traditional year of internship to be abolished after 1 Jul 1975.



The Honorable Richard S. Wilbur, M.D.—“The Navy programs for training corpsmen are justly celebrated, as are the Nurse Practitioner Programs. There is a need to define precise limits of operating function.”

RADM George H. Reifenstein, MC, USNR, Director of Clinical Investigation, and, Consultant for Medical Department Education and Training, Bureau of Medicine and Surgery (BUMED) reported on the present status of the Navy's Clinical Investigation Program (CIP). The CIP will now conduct its own annual meetings independently, in the Washington, D.C. area.

CAPT Scott G. Kramer, MC, USN, Commanding Officer, Naval Hospital Boston, Chelsea, Mass., presented a comprehensive plan to strengthen graduate training hospital professional staffs. He proposed a number of recommendations for increasing professional personnel retention incentives.

VADM George M. Davis, MC, USN, the Surgeon General, called upon the participating physician leaders to light the way for ongoing reorganization of health care delivery systems. Although it is not the intent to force clinicians into administrative positions, he commented, it is realistic to expect that senior clinicians should function concurrently, comfortably and competently, as managers within the system. Coordination between naval hospitals, outpatient facilities and chiefs of service must be maintained. Every specialist must become interested in the outpatient department if our regionalization plan is to succeed.



VADM George M. Davis, MC, USN, Surgeon General.—
"Every specialist must become involved in outpatient medical care if our regionalization plan is to succeed."



RADM D.L. Custis, MC, USN.—"Corporate adjustment is necessary for specialty masters. Parochial empire builders are out; responsible dissent is welcome; the troubled iconoclast we can't afford."

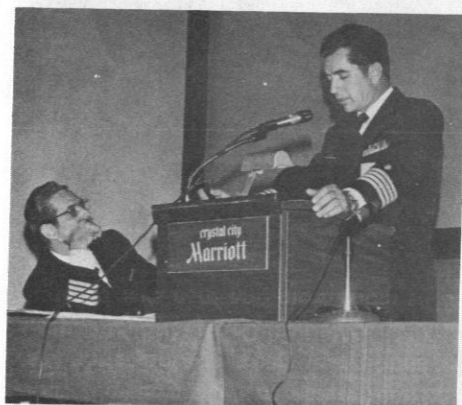


THE YOUNG CLINICAL ADMIRAL—RADM W.J. Jacoby, MC, USN.—"The Director of Medical Education and Research serves as a catalyst to stimulate Chiefs of service within the hospital to accomplish the objectives of patient care, investigation and research efforts."

The Honorable Richard S. Wilbur, M.D., Assistant Secretary of Defense (Health and Environment) reiterated the emphasis to be placed upon primary care, and noted that medical officer retention will be a great concern of the future. Outpatient department staffs will consist of more career-oriented personnel as two-year men diminish in number with phase-out of the draft, he predicted.

Under the chairmanship of RADM David P. Osborne, Assistant Chief for Personnel and Professional Operations, BUMED, a Medical Corps Personnel Management Panel composed of members of the BUMED Professional Division conducted a discussion period. This forum stimulated active interchange of ideas and did much to increase the Committee members' understanding of many complex issues presently confronting graduate medical education and health care services in the Navy.

A half-day session was also devoted to newer plans for the delivery of health services to our Navy population. Among the presentations was a helpful discussion of the family practitioner's role in the Navy's health care delivery system by CDR James J. Quinn, MC, USN, the Senior Medical Officer at the Admiral Joel T. Boone Clinic, Naval Amphibious Base, Regional Medical Center, Portsmouth, Va. Additionally, the role of the physician's assistant and the various types of nurse practitioners, in the climate of an all-volunteer force, was discussed by: CAPT Edward J. Rupnik, MC, USN, the Commanding Officer, Naval Medical Training Institute, National Naval Medical Center (NNMC), Bethesda, Md.; CDR Charles L. Gaudry, MC, USN, the Officer-in-Charge, Navy Physician's Assistant Training Program, Sheppard Air Force



RADM-Selectee E.J. Rupnik, MC, USN.—“The Navy Physician's Assistant Training Program.” (This presentation will be featured in a later issue of U.S. NAVY MEDICINE.)



CDR C.L. Gaudry, MC, USN.—“The Navy Physician's Assistant Training Program at the U.S. Air Force School of Allied Health Sciences, Sheppard Air Force Base.”



CDR James J. Quinn, MC, USN.—“The Primary Physician and Family Medicine in the Navy.”



PRIMARY HEALTH CARE PANEL—Some of the seated members of the panel are, from left to right: CDR J.J. Quinn, MC, USN; CDR C.L. Gaudry, MC, USN; CAPT E.A. Jones, MC, USN; CDR Ruth E. Wilson, NC, USN; and LCDR Kathryn Campen, NC, USN.

Base, Tex.; CDR Ruth E. Wilson, NC, USN, Head, Training Branch of Nurse Corps Division, BUMED; and LCDR Kathryn Campen, NC, USN, the Instructor, Navy Nurse Corps Obstetrics and Gynecology Clinician Training Program, Naval Hospital Portsmouth, Va. These presentations were followed by an active discussion period.

During the following two days of the meeting, the members of the committees met in separate conference rooms to form specialty working groups. There they reviewed in detail the qualifications of each residency or fellowship training applicant, and formulated selection recommendations for the BUMED Professional Advisory Board. Of those who requested inservice training, the Specialty Advisory Committees recommended the selection of 252 out of 492 applicants. Of the remaining 240 applicants, 165 were recommended as alternates who will be considered for



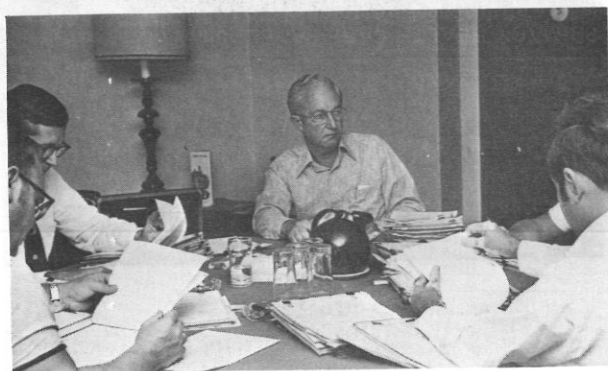
MEDICAL CORPS PERSONNEL MANAGEMENT PANEL—Some of the panel members seated (from left to right) are: CAPT J.N. Trone, MC, USN; Moderator, RADM D.P. Osborne, MC, USN; CAPT R.K. Barton, MC, USN; CAPT J.W. Cox, MC, USN; RADM-Select E.J. Rupnik, MC, USN; RADM D.L. Custis, MC, USN; and CAPT N.G. Lewis, MC, USN.

any remaining vacancies when the second Residency/Fellowship Selections Session of the Professional Advisory Board convenes in Jan 1973.

After completing the residency selection recommendations, the committees focused their attention on issues germane to their individual specialties and those broader issues which affect graduate medical education.

The Surgeon General was encouraged by the active participation and professional enthusiasm displayed by each of the distinguished members of the Specialty Advisory Committees as they pursued the resolution of the manifold issues presented. Their obvious dedication, industry and loyalty give every indication that the future of the Navy Medical Corps, and its educational programs, is more promising than ever before.

SPECIALTY ADVISORY COMMITTEES AT WORK



RANDOM CANDIDS







To the Editor: Your note on the first woman line officer assigned to ship's company at sea (U.S. NAVY MEDICINE 60:[3] 48, Sept 1972) is in error. LT Charlene Suneson, USN was assigned to the transport ship USS *General Mann* (TAP-112) in 1962.

CDR T.E. Carson, MC, USN
Naval Hospital
Oakland, Calif.

Within the context of the filler which you cite, the writer reported that LT (jg) Ann E. Kerr, USN was the first woman line officer assigned to sea duty since the dissemination of CNO's Z-Gram 116.

A reliable source from BUPERS has advised that probably the first women line officers ever to serve at sea were two Reserve women officers who were assigned to transport ships in June 1949 for two weeks' active duty for training. You are correct, so far as we can tell, that LT Suneson was the first woman line officer ever assigned to a regular tour of duty at sea.

Section 6015, Title 10 of the U.S. Code states that: "Women may not be assigned to duty in aircraft that are engaged in combat missions, nor may they be assigned to duty on vessels of the Navy other than hospital ships or transports." The section does not apply to women officers of the Medical Corps, Dental Corps, Nurse Corps, or Medical Service Corps. Repeal of the section by congressional action would be necessary before any other women, officer or enlisted, could be assigned to combatant ships. It is anticipated that ratification of the 26th Constitutional Amendment on Equal Rights could also trigger legal or legislative actions to repeal the Title 10 restriction. The amendment, which says in part, "Equality of rights under the law shall not be denied or abridged by the United States or by any state on account of sex," has already been ratified by 20 of the necessary 38 states.

To the Editor: Reservists will assume increased importance in the months ahead. The all-volunteer force, while offering benefits far above those of previous years, might still find itself wanting in the professional fields such as medicine. Persons in these groups have often been exposed to positions of high income and lucrative private practice. Not only is the financial advantage of civilian life more attractive, but also the stable location, as opposed to periodic moves required of the career officer. These factors, combined with the loss of personal control over duty assignment or regional location, might be expected to contribute to medical billet vacancies.

As the utilization of weekend warriors increases, many who are available in most communities may well become weekday warriors. Additional drill allowances and ACDUTRA assignments might provide a temporary answer to the shortages that will be faced in the early days of the all-volunteer force. While the creation of an Armed Forces Medical School may offer some relief, the first graduates are still several years away and approximately 75 graduates per year will have to be shared among the military services. Some stopgap measure to ensure continued competent medical care for the armed services will surely be necessary. In such a setting, the reservist might prove more useful than is currently appreciated.

The following suggestions might form a basis for useful topics to be considered by future policy-making boards, which, to my knowledge have not concerned themselves in the past with medical programs.

1. Assign Reserve Medical Officers Directly to SMOs.

Senior medical officers would be permitted direct access to reservists, thereby meeting the needs of a department without restraints imposed by present organization tables.

2. Permit Freedom of Drill Selection.

Medical services would achieve better

coverage if the reserve medical officer were permitted to serve on his day off from private practice, etc. Bunching up on one day or weekend would be eliminated, and active duty medical officers could be assisted more effectively when patient load is increased.

3. Increase Medical Pay Billets.

The number of pay billets allowed could be determined by the local needs of the SMO.

4. Upgrade Pay Billets.

At the present time, higher grade officers are either dropped or required to drill without pay. This practice discourages participation by those who might be of considerable help.

5. Permit Additional Drills.

As the needs of a particular station increase, the reserve officer could be permitted additional drills including ACDUTRA. This might serve to fill temporary vacancies created by the discharge or transfer of active duty officers.

6. Increase Use of Paramedics.

Increased use of paramedical personnel could be achieved by adding short courses designed to qualify corpsmen for Physician Assistant positions.

7. Use Commissioned Medical Student Officers.

Such officers could be assigned to the SMO, in a manner similar to that used for externships. Use could be made of their services on weekends, or during their spare time.

There are many other ideas which are yet to be explored. The demands for increased utilization of reservists in other categories will add to the workload of active duty medical facilities. Reserve medical officers provide an excellent resource with which to meet extended commitments.

CAPT Emerson Emory, MC, USNR
2700 Grand Avenue (Number 102)
Dallas, Tex. 75215

To the Editor: I believe an error was made on page 41 of the September issue of *U.S. NAVY MEDICINE*, wherein it stated that: "Alcoholism is the third leading cause of death in the U.S." While I am in complete accord with the general view expressed in the article, this statement grossly overstates the case. Such editorial "overkill," official or otherwise, tends

to open our credibility to serious question. Lacking a generally-accepted definition for alcoholism, it is risky to be specific about this entity in statistical analysis, unless one's diagnostic criteria are rigidly defined. It is such a credibility gap which, I feel, has contributed much to our difficulty in venereal disease and drug abuse control, both in military and civilian medicine.

Along with the Bureau's renewed emphasis on alcoholism, it may be well to invite readers' attention to the excellent article by Ewing entitled "How to Help the Chronic Alcoholic" in the August issue of *American Family Physician*.

In a lighter vein, we in the attack carrier community very much look forward to our monthly issue of *U.S. NAVY MEDICINE*. The "Notes and Announcements" section is particularly enjoyable. Keep up the good work.

A suggestion: it seems that most of your book reviews are by persons from NNMC. Why not "farm out" newly received books to qualified or board-certified persons elsewhere in our medical community. This would allow more reviews and more diverse opinions.

CDR C.H. Bercier, Jr., MC, USN
Senior Medical Officer
USS FRANKLIN D. ROOSEVELT (CVA-42)
FPO New York 09501

The authoritative source of the statement that alcoholism is the third leading cause of death in the U.S. is none other than the Director of the Alcoholic Rehabilitation Center at Naval Hospital Long Beach, Calif., CAPT Joseph J. Zuska, MC, USN (Retired-active). CAPT Zuska has made this statement in several professional papers, including one entitled "Education and Rehabilitation of Alcoholics," which appeared in the U.S. Naval Safety Center's BIOENVIRONMENTAL SAFETY NEWSLETTER, pp 9-15, Mar 1971. We have extended an invitation to CAPT Zuska to publish a paper on the treatment of alcoholism in U.S. NAVY MEDICINE, and hope that he will do so in the future. Perhaps he will be good enough to clarify this point for us in a "Letter to the Editor."

We are willing to try "farming out" books for review suitable for publication in U.S. NAVY MEDICINE. We don't have adequate staff to closely monitor such a program, but will give it a try. If you wish to participate, let us know your specialty areas, name, rank and official address. Reviews should be submitted within two months after receipt of the book. ☘



RETENTION QUESTIONNAIRE

In the immediate future every medical and dental officer on active duty will receive a very important questionnaire that will require about 45 minutes to complete. This questionnaire is designed to determine why doctors do or do not choose a Navy career and will provide the Bureau with statistical data to assist us in improving the quality and attractiveness of a Navy medical or dental career.

We urgently need your cooperation and assistance in this important project. Please complete and return the questionnaire promptly. It will be time well spent. It is your personal chance to do something for the future of the Medical Department and to have your say about how things should be improved.—Code 31, BUMED. 🍀

DEPENDENCY STATUS AND PREGNANCY STATUS FOR WOMEN

Judging from recent inquiries received in BUMED, the following official definition of dependency status and pregnancy status for women should prove useful. This information has been taken directly from the Bureau of Naval Personnel Manual 1070100:

1. As used in this Manual the terms dependency status and pregnancy status are defined as:

a. Dependency status. Being a parent, natural or adoptive, of a child under 18, or having primary custodial responsibility of a child under 18, or being a step-parent of a child under 18 who resides in the woman's household more than 30 days a year.

b. Pregnancy status. Medical certification of pregnancy.

2. Women with dependency or pregnancy status as defined above shall not generally be allowed to enter or remain in the naval service. The Chief of Naval Personnel will consider on a case basis requests for exceptions to this policy under the provisions outlined below. A woman who is authorized by exception to serve with dependency or pregnancy status is expected to retain a high degree of commitment to concurrently fulfill her full professional responsibilities. No exemption from other personnel policies or preferential treatment by virtue of such status is to be anticipated. Commanding officers shall ensure that this paragraph is brought to the attention of any woman desiring to request exception to this policy in order that possible conflicts between her role in maintaining the Navy's posture of readiness and mobility and her motherhood role are fully understood.

3. Applications for enlistment, officer candidate enlistment, direct appointment and reappointment, or reenlistment more than 24 hours after separation shall not be accepted under any circumstances from women who are pregnant at the time of application. Prior pregnancy shall not of itself be a bar to application and where follow-on dependency status as defined above has not resulted, shall not require application review by the Chief of Naval Personnel, except as part of otherwise prescribed procedures. These same applications shall not be actively solicited from women with dependency status. However, when the needs of the naval service would best benefit by such action, applications from women in this category may

be forwarded to the Chief of Naval Personnel for consideration. Applications shall include supporting evidence of the special skill, training, experience, etc., which will benefit the Navy and a brief explanation of dependency circumstances and dependent care arrangements relative to allowing for full attention to service responsibilities.

4. Women on active duty who acquire dependency or pregnancy status and who desire to remain in the Navy shall request retention consideration from the Chief of Naval Personnel. Consideration will be on a case basis.

a. A request for retention in service with dependency/pregnancy status shall be forwarded via the appropriate chain of command and shall include:

(1) Statement of dependency circumstances/Medical certification of pregnancy

(2) Statement of motivation for retention in service

(3) Commanding officer's recommendation, to include:

(a) Substantive comment concerning level of performance

(b) Substantive comment concerning potential for continued beneficial service to the command and to the Navy

(c) Judgment concerning feasibility of dependent care arrangements relative to requirements of billet and watchstanding duties, etc. In pregnancy cases the commanding officer's recommendation shall also include a statement as to whether loss of the member's service while in a leave status during the maternity period can be absorbed and the anticipated dates of commencement of leave and return to full duty. A minimum of six weeks' leave during the prenatal period and a maximum of six weeks' leave during the postnatal period shall normally be prescribed unless otherwise indicated by the attending physician.

(4) Recommendations from other appropriate sources, if desired (Chaplain, Division Officer, Chief Nurse, etc.)

b. Leave requested by active duty personnel for maternity purposes, if granted by the Chief of Naval Personnel, will be charged as earned leave, or a combination thereof. Excess leave will be granted only in cases in which a combination of earned leave due and advance leave is insufficient to cover the total leave period.

Sick leave may be utilized during the postnatal period if authorized by the hospital commanding officer on the advice of the attending physician. Should pregnancy be terminated prior to implementation of leave, the Chief of Naval Personnel shall be notified immediately via the commanding officer.

5. Women reservists on inactive duty who acquire dependency or pregnancy status and who desire retention in the Naval Reserve shall forward such requests to the Chief of Naval Personnel for consideration in the same manner as prescribed above, except that the following information shall be substituted for that relative only to active duty status:

a. The commanding officer's recommendation shall include his judgment of the feasibility of proposed dependent care arrangements relative to requirements of assigned mobilization billet in the event of call to active duty.

b. Request for retention shall include the anticipated number and dates of drill periods to be missed during the immediate prenatal and postnatal period.

6. Requests for separation by reason of dependency or pregnancy status shall be submitted in accordance with the guidance prescribed in the separation chapter of this Manual. ☛

NAVY PRESENTS ACP POSTGRADUATE COURSE

An ambitious involvement in postgraduate medical education is currently underway with plans for a Navy-sponsored course entitled "Problems of International Health," under the sponsorship of the American College of Physicians (ACP) Postgraduate Course Program.

This course will present an up-to-date review and deal with recent advances in those areas of medicine which, as a result of international travel, are assuming greater potential importance for the practicing internist.

The 38 faculty members will include experts from the Navy's worldwide clinical and research facilities, as well as various authorities from the civilian, federal, and other military medical communities.

A major theme will be the practical aspects of health care for today's international traveler. Recent advances in immunology and pathophysiology of specific infectious and parasitic diseases will be emphasized, including sessions devoted to schistosomiasis; the

diarrheas and dysenteries; mycobacterial diseases; malaria; genetic, nutritional, and cultural factors in disease; and other exotic diseases of foreign origin.

The course will be held 5-8 March 1973 at the LeBaron Hotel, Mission Valley, San Diego, Calif. Codirectors are RADM Herbert G. Stoecklein, MC, USN, and CAPT Willis S. Myers, MC, USN. Between 200 and 500 civilian and military physicians are expected to attend.

Standard tuition rates of \$80 for residents and ACP members and fellows will be in effect for military officers. The fee for associates of the College will be \$40.

Further information, including a complete program outline and registration form, may be obtained from the Registrar, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104. Medical officers who are stationed at BUMED-commanded activities may seek government sponsorship for attendance through their commanding officers under the provisions of BUMED Instruction 4651.1 series. Medical officers stationed at non-BUMED commanded activities may seek government sponsorship under the provisions of SECNAV Instruction 4651.15 series.

Incidentally, Associateship in the American College of Physicians is a worthwhile consideration for interns and residents in internal medicine and related specialty programs. Election is accomplished by application and recommendation of the chief of the training program. For the annual dues of \$10 there are numerous advantages, including subscription to the *Annals of Internal Medicine*, reduced registration fees for postgraduate courses, and eligibility for group insurance programs. Application forms may be obtained from:

Edward C. Rosenow, M.D., FACP
Executive Vice-President
American College of Physicians
4200 Pine Street
Philadelphia, Pa. 19104. ☎

RESERVE RETIREMENT POINT CREDIT

The majority of naval reservists are aware of the fact that the Chief of Naval Personnel may authorize retirement point credit for attendance of reservists at professional meetings, seminars and symposia. Beyond this general knowledge, information becomes hazy. Certain additional facts concerning credit may be useful to all Medical Department reservists.

To qualify for retirement credit consideration, a

meeting must be of at least two hours' duration and be sponsored, supervised, and conducted by one or more of the military departments, or be designated by the Navy Department as being of such military value that the instruction received would enhance the reservist's professional development and/or mobilization potential.

The Department of Health, Education and Welfare (HEW) publishes a "Calendar of National Meetings," on a quarterly basis. This is a comprehensive list of meetings which are of interest to members of all of the health care professions. As a service to Medical Department reservists the HEW Calendar is given blanket approval for retirement point credit, and the District Medical Program Officers are so notified at the same time they are furnished copies of the calendar.

What of local or other meetings which might have only limited interest? Individual naval reservists or meeting sponsors may request retirement credit for such programs. Requests for approval should be sent to the Chief of Naval Personnel via the Chief, Bureau of Medicine and Surgery, and the Commandant of the appropriate Naval District. A copy of the meeting agenda or proposed agenda must accompany the request. It is the program sponsor's (in this case BUMED) responsibility to review the agenda, and to determine if the meeting conforms to the foregoing policy. Requests for certification should reach BUMED as far in advance of the convening date as possible. Requests for retroactive credit are not given favorable consideration.

The Chief of Naval Personnel will notify BUMED, the Commandant of the District in which the meeting will be held, and Naval Officer Record Support Activity (NORSA) of final approval. The District Commandant in turn promulgates this information to interested reservists. Written orders are not required and are not issued. Attendees are usually asked to certify attendance directly to NORSA, without reference to any other office.—Code 36, BUMED. ☎

NAVAL RESERVE UNIFORM ALLOWANCE ENTITLEMENT DATES

The Naval Officer Record Support Activity (NORSA), Omaha, Neb., receives many inquiries from USNR officers that ask: "When was I last entitled to a uniform allowance?" or, "When will I complete four years for a uniform maintenance allowance?"

In order to apprise officers of this information, NORSA has instituted a new procedure whereby each officer for whom a uniform allowance claim is certified is sent a post card advising him of the date of his

last entitlement. It is important that the officer retain this card to determine the due date of his next entitlement.

If you have not yet received one of these cards and think you may be entitled, don't send a letter; send a completed claim form. The prescribed form is NAVPERS 3091. However, a revised claim form, NAVPERS 5890/1, has been placed into the system which will be used after the supply of NAVPERS 3091 has been exhausted. If you are entitled, NORSA will then certify your claim for payment and send you a post card. If not entitled, your claim will be returned to you with an explanation.

When you receive your notification card or any correspondence dealing with uniform allowance entitlement, file it with your personal records for future reference. This will keep you apprised of your entitlement period, and eliminate unnecessary correspondence which, in turn, will result in improved service to you and all Naval Reserve officers.—Code 36, BUMED. ☞

HEARING CONSERVATION FILMS

All personnel need to be made aware of noise hazards, as well as what they must do to protect themselves. They must be impressed with all of the consequences of hearing loss medical, social, and psychological effects. Exposure to noise can result in hearing loss that not only can become a handicap, but what is worse, a hearing loss that cannot be restored either through surgery or with a hearing aid.

MEDICAL DEPARTMENT PERSONNEL ARE RESPONSIBLE FOR IMPLEMENTING A HEARING CONSERVATION PROGRAM AT THEIR RESPECTIVE ACTIVITIES.

There is a natural resistance among noise-exposed personnel to wearing protective devices. Their understanding of and use of these devices will involve adopting new attitudes and personal work habits. This "educational" phase of your program is especially important and deserves careful planning, for much of the value of the overall program will depend on its success.

Films, hand-outs, and posters are helpful in selling personnel on the concept of hearing conservation. Such materials should support your program, not replace it. Films and hand-outs are reinforcement for your points, but *you* have to make the points first. Nothing surpasses a sincere, face-to-face presentation to personnel, to provide a clear understanding about

the noise problem and protective measures they must take. Participation by the medical officer is the most effective way to convey the message on hearing protection to personnel. Personnel are more impressed by the "medical officer," and will be more inclined to remember and accept his recommendations.

Personnel must be sold on *wanting* the long-term benefit of good hearing and the possible benefit of a better home life, if they are to put up with the initial physiologic and psychic discomfort of protective devices. They must believe it is for *their* benefit and *their* protection, as much as for the government's.

The following *free* films have been previewed and are recommended for use by all ships and activities. Films listed are available at no cost to you on a loan basis:

- 1) Title: The Sound of Sound, color, 16 minutes.

Available from: American Optical Corporation
Safety Products Division
Southbridge, Mass. 01550

- 2) Title: Protect Your Hearing, color, 25 minutes.

Title: Ear Protection in Noise, color, 15 minutes.

Available from: Education and Training Support
Detachment
Navy Film Library
Bldg. 200, Wing 4S
Washington Navy Yard
Washington, D.C. 20390

Phone: Autovon - 288-3342
IDS - 158-3342
Commercial - (202) 433-3342

(These films can be loaned for a period of a month or longer if necessary).

- 3) Title: For Good Sound Reasons, color, 16 minutes.

Available from: Willson Products Division
P. O. Box 622
Reading, Pa. 19603
ATTN: P.D. Brown

- 4) Title: Dangerous Noise: Listen While You Can, color, 16 minutes.

Available from: Rockford I. C. Webb, Inc.
301 N. Madison St.
Rockford, Ill. 61110

—Code 7311, BUMED. ☞

FORMULARY NOTES

Adverse Drug Reaction Reports

The Food and Drug Administration has developed a greatly simplified form for reporting adverse drug

reactions. The form is a franked, self-addressed folding 7x8 in. card which requires only eight entries: date of reaction onset; suspected reaction(s); trade/generic name of suspected drug(s); route, total daily dose and dates of administration; other drugs taken concomitantly; and physician's name, address and zip code. Additional information is optional and all entries may be handwritten.

The dynamic nature of the pharmaceutical industry has resulted in the availability of many new drugs in recent years. FDA badly needs the assistance of practicing physicians and dentists in accumulation of the experience data without which the adverse reaction reporting program can be of little value to the professions. BUMED encourages use of this form, and vigorous participation in the reporting system.

The revised form is titled "Drug Experience Report" (FD Form 1639a [6/72]). These may be obtained from: Department of Health, Education, and Welfare, Public Health Service, Food and Drug Administration, 5600 Fishers Lane, Rockville, Md. 20852.—From the Chairman, BUMED Formulary Review Committee, Washington, D.C. ☛

SURGEON GENERAL HONORED BY THE ADA

On 29 Oct 1972 at San Francisco, Calif., VADM George M. Davis, MC, USN was elected to honorary membership in the American Dental Association (ADA).



A FIRST FOR MILITARY PHYSICIANS—VADM George M. Davis, MC, USN, Surgeon General (left), is congratulated on election to honorary membership in the ADA by Dr. Russell B. Roth, President Elect of the AMA (center), and Dr. C. Gordon Watson, Executive Director of the ADA (right).

As Surgeon General of the Navy, Admiral Davis has been completely understanding of and sympathetic with the problems of dental officers and patient dental care. He has supported all official recommendations for improving dental resources, professional training and recruitment, and has supported an extensive program to modernize dental equipment throughout the naval service. He has also given his full support to higher authorities in the implementation of public laws concerning expanded promotion opportunities and continuation pay for dental officers of the Navy.

Of the 125 honorary members of the American Dental Association, ten are physicians. VADM Davis is the first military physician to be so honored. ☛

NAVY INDUSTRIAL ENVIRONMENTAL HEALTH WORKSHOP

The Navy Industrial Environmental Health Center, 3333 Vine Street, Cincinnati, Ohio, is conducting the 14th Industrial Environmental Health Workshop at the Sheraton-Charles Hotel, New Orleans, La., 8-12 Jan 1973. The Workshop is co-sponsored by the Bureau of Medicine and Surgery and the Center, and is designed especially for occupational health physicians, nurses and industrial hygienists, and for safety personnel directly involved in administering occupational health and safety programs.

Our professional colleagues and their local organizations are cordially invited to attend any part, or all, of the formal program. Registration fee is \$10.00 for each day or \$50.00 for full attendance.

Further information may be obtained by contacting the Acting Director of the Center, Dr. W. A. Redman, Jr., Navy Industrial Environmental Health Center, 3333 Vine Street, Cincinnati, Ohio 45220. FTS and Commercial telephone numbers: (513) 684-3947 or Autovon 989-3947. ☛

EARLY-OUTS AND PROMOTION DELAYS

The CNO has announced a series of widespread reductions in personnel programs for the rest of this Fiscal Year (FY-73). A new enlisted early-release program, as well as advancement and promotion delays, have become necessary due to increased personnel costs and budgetary restrictions. With the general exception of those serving in Sixth Fleet, Seventh Fleet and Mid East Forces, or on deployed SSN/SSBNs, and in certain other cases, enlisted members whose EAOS fall in Dec, Jan or Feb will be released no later than

10 Dec. Those scheduled for release in Mar are to be out no later than 10 Feb. A continuing one month early-out program is a possibility for the rest of the Fiscal Year. Cuts in the Navy's overall enlisted strength will result in a reduction of petty officer promotions by about 23,000. This will be reflected in the Aug and Feb exam advancement lists. Additionally, 31,000 advancements planned for Feb through May could be delayed into June.

Officer promotions will also suffer various delays. Promotions to CAPT and LCDR will be delayed six months, beginning 1 Dec. Medical officer promotions to CAPT will be delayed the same length of time, commencing 1 Jan. As of 1 Feb, LTJGs will need 45 months of active commissioned service to be promoted to LT, and beginning 1 Jan, ensigns will require 21 months of active commissioned service for promotion. This delay affects ensigns with dates of rank later than 1 Jul 1971. The total number of officer and enlisted moves in FY-73 will also be reduced, due to restrictions on PCS funds. Information on the personnel program reductions and specifics on the early releases are contained in CNO NAVOPS 142127Z and 162039Z Nov 1972, respectively. —CHINFO Newsgram (45-72). ☘

SANCTUARY RECOMMISSIONED

The hospital ship *USS Sanctuary (AH-17)*, the Navy's first ship with a mixed male-female ship's company, was recommissioned on 18 Nov at the Hunter's Point Naval Shipyard in San Francisco. RADM Alene Duerk, NC, USN, Director of the Navy Nurse Corps and the Navy's first woman admiral, was guest speaker at the ceremony. Two women officers and 60 enlisted women have been assigned to the ship's company. *SANCTUARY*'s total crew, including the hospital staff, will number 70 officers and 460 enlisted personnel. *SANCTUARY* is commanded by CAPT Thomas A. Rogers, USN of Philadelphia, Pa., and the ship will be homeported in San Francisco. ☘

CENTRAL MEDICAL REVIEW BOARD FOR SERVICE ACADEMIES

Early in 1972, the Assistant Secretary of Defense for Manpower and Reserve Affairs directed the establishment of a Service Academies' Central Medical Review Board. The Board is located physically on the grounds of the U. S. Air Force Academy in Colorado. However, it is a joint-service staffed board and has

physician, dentist, and medical technician representatives from the Coast Guard and from the Departments of the Army, Navy, and Air Force. The Board is a central agency for scheduling, receiving, and evaluating medical examinations accomplished for all U.S. Service Academies (Army, Navy, Air Force, Coast Guard and Merchant Marine).

All medical examinations accomplished on service academy applicants are forwarded to this Board for final evaluation to determine the applicant's qualifications for the service academy to which he is applying. Information gained from the evaluation is retained by the Board until it is requested by the various service academies.

The principal advantage of this new system is that it encourages more effective use of medical examining centers. At the request of Members of Congress, the Board schedules applicants for physical examinations on specific dates. The examinations are conducted by whatever military medical facility authorized to conduct examinations is located nearest to the applicant's home, regardless of the specific academy for which he is applying. BUMEDINST 6120.3 was recently revised to reflect full details.

Further information may be obtained by writing to the Director, Service Academies' Central Medical Review Board, U.S. Air Force Academy, Colo., 80840. The Autovon number is 259-3560.—Head of Medical Dept., U.S. Naval Academy, Annapolis, Md., 21402. ☘

AMERICAN COLLEGE OF DENTISTS

CAPT Gordon H. Rovelstad, DC, USN, Head, Research Branch, Dental Division, BUMED, was installed as a Regent of the American College of Dentists on 28 Oct 1972, in San Francisco, Calif.

Each year, two Fellows are elected to serve four-year terms on the Board of Regents which, with the elected officers, administers the business affairs and professional programs of the College.

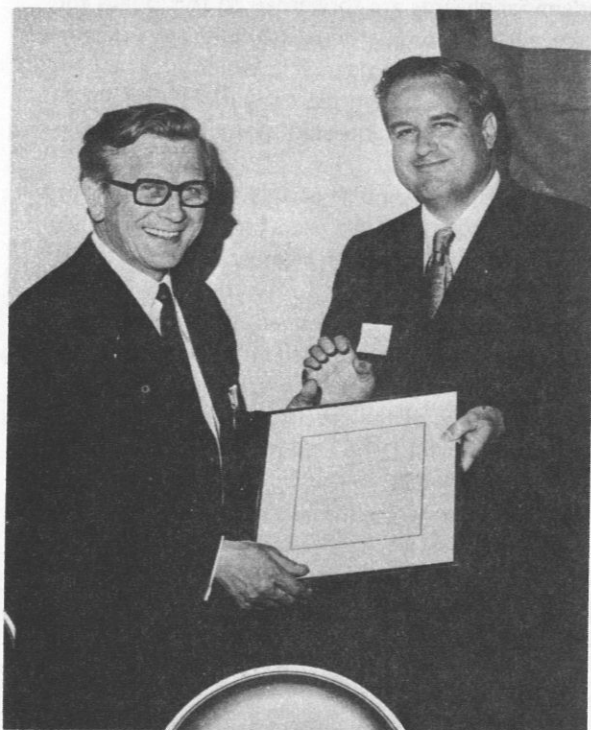
During the annual meeting, CAPT Frank N. Ellis, DC, USN; CAPT Herman D. Tow, Jr., DC, USN; CAPT Ronald G. Granger, DC, USN; and CAPT Russell A. Grandich, DC, USN were inducted into the Fellowship of the College. ☘

DR. HUGO OBWEGESER LAUDED

Dr. Hugo Obwegeser, world-renowned oral surgeon of Zurich, Switzerland, was presented a Letter of Appreciation from the Chief of the Dental Division,

RADM J. P. Arthur, DC, USN, on 20 Oct 1972 at Tacoma, Wash.

Dr. Obwegeser, who has provided advanced training in maxillofacial surgery for several Navy oral surgeons, was commended for the professional inspiration and academic stimulation he has given to those associated with him.



CAPT Bill Terry (right), Chief, Dental Service, Naval Hospital, NNMC, Bethesda, Md., presented a Letter of Appreciation on behalf of the Navy to Dr. Hugo Obwegeser (left). Professor Obwegeser of the Dept. of Oral and Maxillofacial Surgery at the Dental Institute, University of Zurich is a world renowned oral surgeon and lecturer. (Photo by courtesy of U.S. Army Information Officer, Madigan General Hospital, Tacoma, Wash.)

The presentation was made by CAPT William C. Terry, DC, USN on the occasion of the founding of the "Obwegeser Study Club." Dr. Obwegeser was a featured lecturer at the International Prosthodontic Conference held in Las Vegas on 25-28 Oct 1972. He has also received the Distinguished Civilian Service Award from the Department of Defense. 🍷

NEW FLAG OFFICERS IN BUMED

RADM H.P. Mahin, MC, USN.

RADM Harry P. Mahin, MC, USN has succeeded RADM Norris as Inspector General, Medical, Code 12,



RADM Harry P. Mahin, MC, USN

BUMED. The son of a physician, RADM Mahin was born in Canova, S.D., in 1916, but was raised in Iowa.

Earning the degree of Bachelor of Science from the University of Iowa in 1938, Dr. Mahin later received the Doctor of Medicine degree from the University of Louisville School of Medicine, Ky., in 1942. While attending the University of Louisville, he was appointed ENS in the Medical Corps of the U.S. Naval Reserve in 1942; upon graduation he was commissioned LTJG, to date from 26 May 1942. Thereafter he served his internship at Norton Infirmary and St. Joseph Infirmary in Louisville.

After being ordered into active naval service, Dr. Mahin interned at the Naval Hospital Great Lakes, Ill., from April to July 1943. He subsequently joined the USS *Celena* (AK-76) and participated in the consolidation of the Solomons, the Admiralty Island landings and the assault and occupation of Okinawa Gunto. In Jan 1946 he was detached from the *CELENO* and served as Assistant Medical Officer at the Great Lakes Naval Training Center until his release from active duty in April 1946.

During the interim, RADM Mahin acquired surgical training at the VA Hospital in Louisville. Having transferred from the Naval Reserve to the U.S. Navy on 28 Dec 1950, the admiral returned to active duty in Jan 1951 as a member of the staff at Naval Hospital

Oakland, Calif. He subsequently served as Chief of Surgery, and General Surgeon, at the Naval Hospital Guantanamo Bay, and Naval Hospital Great Lakes, respectively. Further surgical training was acquired at the University of Pennsylvania Graduate School of Medicine in Philadelphia, 1955-1956.

Subsequent professional assignments included the following:

Head of General Surgery, Nav Hosp St. Albans, 1956-58.

Head of Dependents Surgery, Nav Hosp Philadelphia, 1958-59.

Assistant Chief of Surgery, Nav Hosp Philadelphia, 1959-61.

Chief of Surgery, Nav Hosp Philadelphia, Pa., 1961-65.

Executive Officer, Nav Hosp San Diego, Calif., 1965-67.

Senior MO at Station Hospital and Head, Medical Dept., NSA, Danang, RVN, 1967-68.

Commanding Officer, Nav Hosp Philadelphia, and DMO, 4th NAV DISTRICT, 1968-69.

Commanding Officer, Nav Hosp Oakland, and DMO, 12th NAV DISTRICT, 1969-72.

For exceptionally meritorious conduct from May 1967 to March 1968, when RADM Mahin directed the operation of the largest casualty receiving and staging hospital in Vietnam, he was awarded the Legion of Merit. He is also entitled to the Ribbon for, and a facsimile of the Navy Unit Commendation awarded the Naval Support Activity, Danang. Progressing in rank to that of RADM, to date from 1 Aug 1969, the admiral was later awarded the Meritorious Service Medal for superb performance of duty in which he was directly responsible for the delivery of health care to more than one million eligible persons in the 12th Naval District.

In addition to the Legion of Merit, the Meritorious Service Medal and the Navy Unit Commendation Ribbon, RADM Mahin has the American Campaign Medal; Asiatic-Pacific Campaign Medal; World War II Victory Medal; Navy Occupation Service Medal, Asia Clasp; National Defense Service Medal with Bronze Star; the Vietnam Service Medal; and the Republic of Vietnam Campaign Medal with Device.

RADM Mahin is a Fellow of the American College of Surgeons and the Philadelphia Academy of Surgery, and a Diplomate of the American Board of Surgery. His son, ENS Patrick Mahin, MSC, USNR, is a graduate student in Hospital Administration at the University of Iowa; ENS Mahin will probably report for active duty in the summer of 1973. Another son,

Michael, is a Fulbright Scholar in German Studies at the University of Munich.

RADM P.O. Geib, MC, USN.

RADM Philip O. Geib, MC, USN has succeeded RADM Faucett as Assistant Chief for Research and Military Medical Specialties, BUMED, Code 7. He was born in Verona, N.J., in 1921, but grew up in Pennsylvania. He graduated from high school in Manheim, Pa., in June 1938, having captained an undefeated wrestling team in his senior year.

Admiral Geib received his BS (General Science) degree in 1942 at Franklin and Marshall College, and his M.D. degree from Temple University School of Medicine in Philadelphia, in June 1945. During that same month he commenced his internship at Naval Hospital Boston, Chelsea, Mass., as a LTJG in the Navy Medical Corps. After serving subsequently as Medical Officer at Leyte Samar, P.I., and at Naval Hospital Portsmouth, Va., he began his training in General Surgery in 1948 at Naval Hospital, Philadelphia. Following surgical assignments at Naval Hospital Corpus Christi, Tex.; Naval Medical Unit, Tripler Army Hospital, Hawaii; and in USS *Valley Forge (CVA-45)*, he returned as Chief Surgical Resident to Naval Hospital Portsmouth, Va. Upon completion of his surgical



RADM Philip O. Geib, MC, USN

training, RADM Geib was certified by the American Board of Surgery.

Additional professional assignments included the following: Assistant Chief of Surgery at Naval Hospital Annapolis, Md.; Surgeon and Senior Medical Officer in USS *Iowa* (BB-61); Assistant Chief and Chief of Surgery at Naval Hospital Portsmouth, Va.; Chief of Surgery at Naval Hospital Pensacola, Fla., and Naval Hospital Great Lakes, Ill.; Executive Officer and Chief of Surgery at U.S. Naval Hospital Yokosuka, Japan; Commanding Officer of U.S. Naval Hospital Yokosuka with additional duty as Staff Medical Advisor, U.S. Forces Japan and Force Medical Officer, Naval Forces Japan. While serving as Commanding Officer of Naval Hospital Camp Lejeune, N.C., he was promoted to RADM on 1 Jul 1972.

Admiral Geib is a Diplomate of the American Board of Surgery, a Fellow of the American College of Surgeons and the American College of Chest Physicians, and a member of the American Medical Association and the Pan American Surgical Society.

In addition to the Meritorious Service Medal, RADM Geib has the Navy Unit Commendation awarded U.S. Naval Hospital Yokosuka, the American Campaign Medal, the World War II Victory Medal, the National Defense Service Medal with one Bronze Star in lieu of second award, the Korean Service Medal and the United Nations Service Medal. 🇺🇸

CDR KERWIN ADDRESSES NMA SECTION

Astronaut Joseph P. Kerwin delivered the keynote address at a recent meeting of the Section on Aerospace and Military Medicine of the National Medical Association (NMA) at the Muehlebach Hotel in Kansas City, Mo., on 15 Aug 1972.

CDR Joseph P. Kerwin, MC, USN is a 1957 graduate of Northwestern University Medical School and has been in the Navy Medical Corps since July 1958. He was selected as a scientist-astronaut by NASA in June 1965 and has been designated to serve as science-pilot for the 28-day Skylab 2 mission, the first manned flight in the Skylab Program.

Dr. Kerwin spoke on "The Past, Present and Future of the U.S. Space Program" at the 77th Annual NMA Convention and Scientific Assembly.

The National Medical Association awarded CDR Kerwin its outstanding achievement award for his significant contributions to the U.S. space effort.



PHYSICIAN-ASTRONAUT SPEAKS—CDR J.P. Kerwin, MC, USN (left) is introduced by LTCOL Frank W. Berry, Jr., MC, USAF (right), Chairman of the Aerospace and Military Medicine Section of the NMA. CDR Kerwin delivered the keynote address and was awarded the NMA outstanding achievement award. (Photo by courtesy of LTCOL F.W. Berry, Jr., MC, USAF; Hq USAF/SGPA.) 🇺🇸

XVTH WORLD DENTAL CONGRESS

RADM A.K. Kaires, DC, USN, Inspector General, Dental, represented BUMED at the International Conference on Military Dental Services planned by the Commission on Armed Forces Dental Services and the Mexican Organizing Committee for the XVth World Dental Congress of the Federation Dentaire Internationale held in Mexico City, Mexico, 19-26 Oct 1972. 🇺🇸

CREDITS TO RESERVE DENTAL COMPANY 8-5 OF DALLAS

The Naval Reserve Dental Company 8-5 of Dallas, Tex., was awarded the Most Outstanding Naval Reserve Dental Company Plaque Award at the Naval Reserve Dental Symposium held in conjunction with the Annual Session of the American Dental Association in San Francisco, Calif., on 30 Oct 1972, for their outstanding contributory support to the U.S. Navy and for their Civic Action Program which included the humanitarian treatment of the POW/MIA dependents. CDR Paul B. Carrington, DC, USNR-R, Commanding Officer, accepted the award from RADM John P. Arthur, DC, USN, Chief of the Navy Dental Corps. 🇺🇸

OFFICIAL INSTRUCTIONS AND DIRECTIVES

FM CNO TO NAVOP (Z-117)

Subj: Equal Opportunities

1. It is my desire that this Z-NAVOP receive the widest possible distribution to all hands on board.

2. On 10 November I addressed the question of recognizing the importance of assuring equal opportunity and fostering mutual understanding in race relations at all command levels of the Navy. My remarks were directed primarily to all in a position of leadership, urging them to direct their fullest efforts at ensuring these programs were being carried out in full.

3. At that time I also stated that there must be no substitution of one prejudice for another. That the prejudice against good order and discipline is as bad as the prejudice of race. It is to this point that I would address all hands.

4. Admiral Ernest King, in speaking to my graduation class, stated that true military discipline is the "intelligent obedience of each for the effectiveness of all." As I have said before, it is through enlightened leadership that we obtain that true military discipline about which Admiral King spoke some 30 years ago.

5. During the past 28 months I have set as my objective bringing about a Navy environment that would assist our naval commanders in providing that enlightened leadership that would ensure "intelligent obedience for the effectiveness of all." I believe that we have been successful. We have outstanding performance by our people who have responded with bravery and dedication to the recent massive invasion of South Vietnam. They have done so in the face of greatly extended and early deployments, reduced shipboard manning and over-long hours seven days a week. Navywide, we have seen overall disciplinary and confinement rates reduced from their earlier figures with commensurate reductions in shore patrol requirements. I am proud of the Navy's performance, for it has truly been superb.

6. On the other hand, it occurs to me that this is perhaps a good time to reiterate to those of our more junior personnel who have entered the Navy in this period of transition and whom I have not had the opportunity to speak with in the past year, my personal philosophy regarding their responsibility to leadership in our Navy. I do this especially since I note that, of those who have been involved in recent incidents of violence or other disruptive activities, the overwhelming majority are those in the 18 to 20 year age category and with less than one year of naval service.

7. This says to me that many of those who are new

to the Navy very well may not be aware of the framework within which we have been working to make the Navy a challenging, interesting and rewarding career, nor of what their responsibilities are to the Navy within that same framework.

8. Let me speak to you, in turn, of your responsibilities to the Navy and our country. What is required of you is self discipline, especially in these times of extended deployments and reduced manpower. It is your duty to your shipmates and those who are responsible for your welfare in time of peace and especially in time of war to conduct yourselves in a manner that contributes to the overall good and welfare of your division, your ship, your station and, in the long run, of your country. You have taken an oath to do so and the Navy will expect nothing less nor will it accept anything less.

9. This self discipline and subordination of self for the good of all is absolutely mandatory for any organization, civilian or military, to function properly. It cannot be any other way.

10. The responsibilities of command are not easy in this modern day of complex machines and even more complex men. Your commanding officer has responsibilities to higher authorities and to his country that stagger the imagination and the magnitude of his responsibilities has been made even greater by the fact that world tensions are not always what we would like them to be. These past nine months have been even more strenuous because of the increased efforts off of the coast of Vietnam.

11. On the day I took command of the Navy I said that I was assuming as my first task the improvement of all aspects of the naval career. I have dedicated myself to that task and have made many changes designed for that purpose. I also said, and I repeat, that those changes will only be made within the framework of the maintenance of good order and discipline, and that those few who would abuse these privileges must be held to account.

12. For those of you who are new to the Navy or who may not be aware of my statements in this regard, let me assure you that I meant what I said then and have reiterated in every succeeding change that could be interpreted to have an effect on personnel behavior. I expect, and will continue to insist upon, the strictest possible adherence to our disciplinary standards in every respect. Those who do not accept these standards can expect to be promptly and fairly disciplined and held responsible for their actions in accordance with the UCMJ.

13. Other changes made during the past two years are designed to assist both the individual and those in command to draw on the assistance of their superiors to resolve problems beyond their immediate ability or responsibility. These include matters such as personnel assignments, transfers, personal services, etc. These are not intended nor in anyway can they be construed to mean an acceptance of "short circuiting" the legitimate chain of command. Commanding officers recognize them for what they are—a tool to be used when solutions are outside an area of responsibility. You should also recognize them for what they are, a solution to problems that cannot be solved within your own command structure.

14. Finally, let me conclude by addressing the matter of your personal responsibilities to the maintenance of good order and discipline, for in this matter there can be no compromise. I addressed myself to our naval leadership on this subject on 10 November. Now let me tell you what I expect of you. I am fully aware of the extra hours worked and the overlong deployments experienced by many; but the Navy is no different than any other institution in that it requires complete and total obedience. It can be no other way.

15. I pledge my continuing efforts to ensure that all of our Navy men and women will continue to receive my full support in making this Navy of ours an exciting, challenging environment in which to work and live with the equal opportunity which can only be achieved within a framework of discipline. In turn I look to you to match the contributions of those who are your seniors in working toward the same goals.—E.R. Zumwalt, Jr., Admiral, U.S. Navy, Chief of Naval Operations.

MANUAL OF THE MEDICAL DEPARTMENT

Change 77 of 14 Sep 1972

This change:

a. Revises Chap. 6, Sec. XIX, Naval Dental Technicians Schools, to accurately reflect the nature of the training involved, and establish common terminology with the civilian community.

b. Updates Chap. 7, Sec. II, Appointments, Medical Service Corps.

c. Revises art. 15-55, Prisoners, to provide that screening pre-physical examinations may be performed by paramedical personnel and to modify the segregation/restricted-diet certification required of the medical officer.

d. Revises Chap. 18, Sec. III, Medical Board, to clarify board procedures and update mailing addresses.

e. Revises and combines art. 22-10 and 22-11 into new 22-10, Confinement Facilities, providing for a quarterly sanitation inspection by the medical officer.

BUMEDNOTE 6220 of 18 Oct 72

Subj: Influenza disease and vaccine status

This notice provides current information on influenza disease and influenza vaccine for the forthcoming influenza season. Isolated strains from the recent influenza outbreaks (Australia, Southeast Asia and certain U.S. Pacific Fleet ships) resemble A/England 42/72. They show a considerable (fourfold) shift in antigenicity from Hong Kong influenza strains, though it is important to note that there is some cross-reactivity. Licensed influenza vaccines do not contain the A/England component; however, the vaccine should offer some protection through the A/Aichi component (included in both the 1971-72 and 1972-73 vaccines). A monovalent vaccine against A/England strains will not be available during the forthcoming influenza season due to manufacturing time requirements. Next year's vaccine will undoubtedly include an antigen from the new strains.

Commands are to:

a. Vigorously implement the requirements of BUMEDINST 6230.1F, Immunization Requirements and Procedures, to minimize the impact of an influenza outbreak.

b. Institute general measures to reduce physical stress, fatigue, and crowding of personnel.

c. Promptly begin symptomatic treatment for patients with influenza.

d. On suspicion of an influenza outbreak at a command, immediately report the occurrence in accordance with BUMEDINST 6220.3, Special Epidemiological Report (MED 6220-3).

e. When necessary, seek consultation by telephone, message, or letter from Navy area environmental and preventive medicine units.

BUMEDNOTE 6224 of 17 Oct 72

Subj: Tuberculin PPD; availability of new preparation

The U.S. Public Health Service has developed a stabilized tuberculin PPD called PPD-T, standardized it to PPD-S (the official standard), and has made it available at no cost to the Armed Forces via the Federal Supply System. Previously available tuberculin

preparations become subpotent if too long a period elapses in mixing, filling the syringe, and injecting the material. The use of PPD-T provides a temporary measure until such time as an acceptable commercial product is approved for Navy and Marine Corps use.

Orders for tuberculin, purified protein derivative, intermediate strength (5 tuberculin units per 0.1cc) shall be for this new preparation. Potency is 12

months from date of production. The 50-dose size is FSN 6505-105-0102 and the 100-dose size is FSN 6505-104-9448.

Because previously available tuberculin preparations may have been administered at subpotent strength, recent positive reactors (convertors) should be carefully evaluated to make sure they are truly "recent convertors" rather than previously unrecognized positives. ☙

CAPT NOLAN RECEIVES NAVY COMMENDATION MEDAL

CAPT Robert L. Nolan, MC, USNR recently added the Navy Commendation Medal to previous honors and recognition he has won by involvement in diverse professional, community and educational activities. An attorney as well as a physician, he is the Chief of staff at the Veterans Administration Hospital, Martinez, Calif.

Recently returned to the Bay Area, the former member of the Oakland Board of Education was cited for his contributions to Naval Reserve programs in the Fifth Naval District, headquartered at Norfolk, Va.

The award was presented to Dr. Nolan by RADM Ralph E. Faucett, MC, USN, Commanding Officer of Naval Hospital, Oakland, in ceremonies conducted at Treasure Island on 5 Sept.

As the Commandant's representative at the University of West Virginia, Morgantown, W. Va., Dr. Nolan was credited with increasing student participation in the Naval Reserve Medical Programs 300%. He also commanded a Naval Reserve Medical Company, which he organized, and served in a training capacity for another unit.

The citation from the Secretary of the Navy said in part: "As a result of CAPT Nolan's enthusiastic efforts, the West Virginia University School of Medicine now has one of the highest Navy Medical Student enrollments in the nation."

The Naval Reserve captain has compiled an unusual career as a student and educator, in public health service, medicine, and law. He has combined those things with a varied background and continuing interest in military service.

Following graduation from Townsend Harris High School, New York City, CAPT Nolan earned a BA degree at New York University in 1948. His education was interrupted by service with the U.S. Merchant Marine from 1944 to 1946, when he served aboard a variety of ships in all war zones.

Dr. Nolan earned his MD degree at Yale University School of Medicine in 1953; He earned the MPH

degree at the University of California School of Public Health in 1961; and in 1968 he was awarded a JD degree at the University of California School of Law.

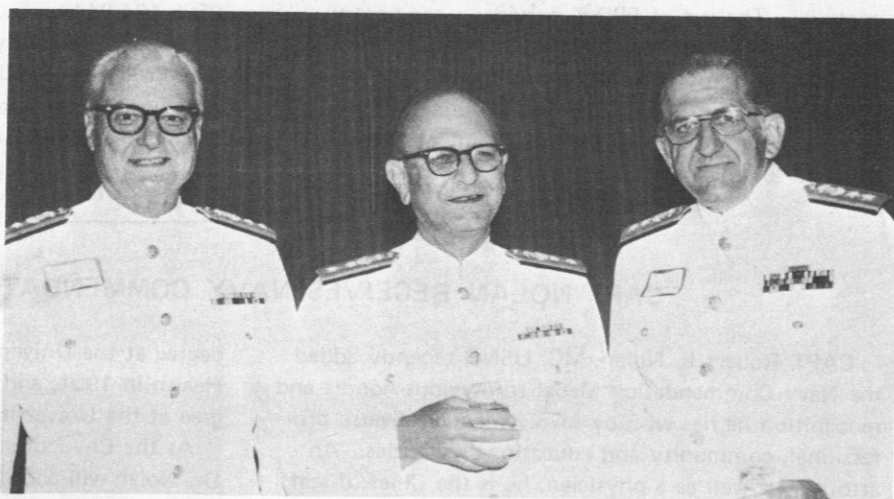
As the Chief of staff at the VA Hospital in Martinez, Dr. Nolan will coordinate educational activities between that institution and the University of California at Davis. As the Commanding Officer of Naval Reserve Medical Company 12-6, he will work to integrate activities of the unit with those of the Naval Hospital Oakland.

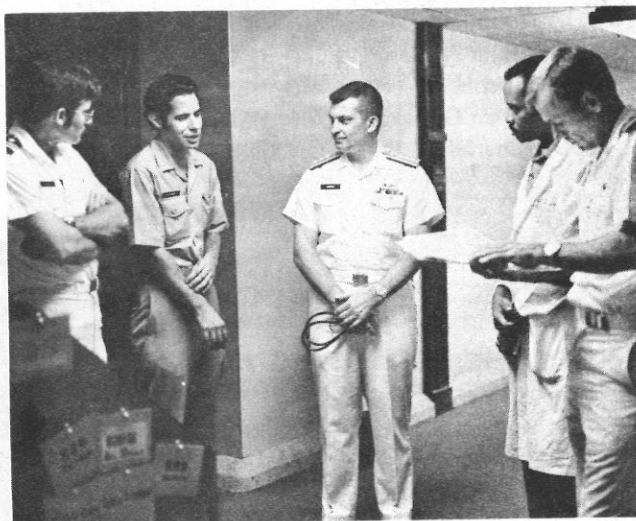
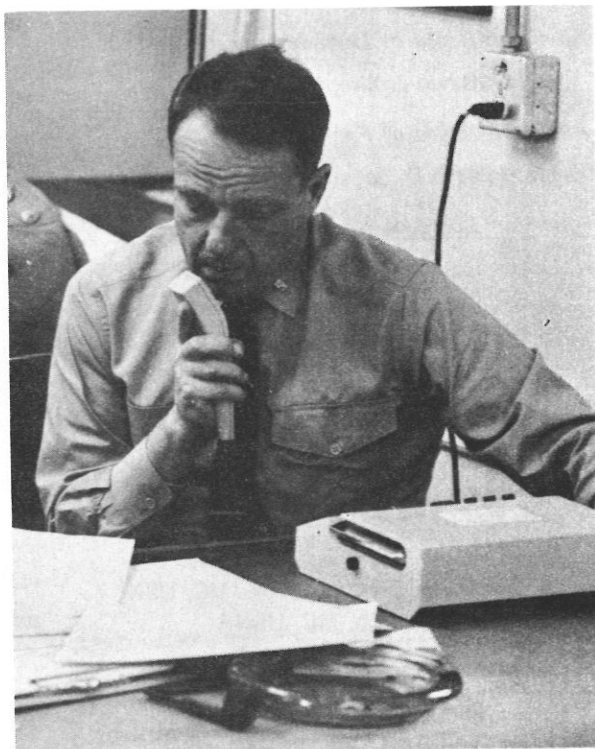
Dr. Nolan has been commended by the state legislatures of California and West Virginia for his public service work. He is also a member of the National Advisory Council on Health Manpower Shortages Areas, a statutory policy-making board within the Department of Health, Education and Welfare.—PAO, 12th Naval District, Treasure Island, San Francisco, Calif.



CAPT Robert L. Nolan, MC, USNR (left), is congratulated upon his receipt of the Navy Commendation Medal by RADM Ralph E. Faucett, MC, USN, Commanding Officer, Naval Hospital Oakland, Calif. ☙

What Do These Gentlemen Have In Common?





They are all physicians who will officially celebrate the 102nd Navy Medical Corps Birthday on Friday evening, March 9, at the Commissioned Officers' Mess (Open), National Naval Medical Center, Bethesda, Md. You ought to attend if you plan to be in the Washington, D.C. area. You'll be in fine company. 🍀

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United States Navy Medicine

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McGovern-Shriver Medical Team — Although they knew little of the political persuasions of Dr. Mark McGovern (right) and Dr. Harry Shriver (left), naval personnel and their dependents knew for sure that the Navy medical staff would be on duty at the Naval Support Activity in Seattle, Wash., on Election Day. Mrs. Julie Terry and one-year-old daughter Shannon consult the timely team. LT M. McGovern, MC, USN of Jersey City, N.J., exercised his right to vote by absentee ballot, but LT H. Shriver, MC, USN had to drive after hours to the polling booth at Redmond, Wash.—PAO, U.S. Naval Support Activity, Seattle, Wash.

U.S. NAVY MEDICINE